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The present year is a
poor one for the
honey bees. The weather
is so cold that the bees
cannot fly. The
honey is very scarce.



HINTS
ON THE
MEDICAL EXAMINATION
OF
RECRUITS FOR THE ARMY;

AND ON THE
DISCHARGE OF SOLDIERS FROM THE SERVICE ON
SURGEON'S CERTIFICATE.

ADAPTED TO THE SERVICE OF THE UNITED STATES.

BY
THOMAS HENDERSON, M. D.,
ASSISTANT SURGEON UNITED STATES ARMY, LATE PROFESSOR OF THE THEORY AND PRACTICE
OF MEDICINE IN COLUMBIAN COLLEGE, D. C., HONORARY MEMBER OF THE
PHILADELPHIA MEDICAL SOCIETY.

A NEW EDITION, REVISED,

BY
RICHARD H. COOLIDGE, M. D.,
ASSISTANT SURGEON U. S. ARMY.

PHILADELPHIA:
J. B. LIPPINCOTT AND CO.

1856.

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TO

DOCTOR THOMAS LAWSON,

SURGEON-GENERAL U. S. ARMY.

SIR:—

There is obvious propriety in dedicating to you this effort to be useful to the Medical Department of the Army.

No exertion has been spared to render this condensed view of two important duties of the army surgeon perspicuous and practical, and to adapt it to the service of the United States. I have made the most of my opportunities for observation, and have drawn abundantly on the most approved authorities.

I have every reason to believe that you will not only duly estimate what may be the merit of the book, but that you will likewise kindly regard my motives in publishing it. If it should facilitate the course of duty, by enlightening the judgment of our medical officers, for whose use alone it is prepared, my object is attained, and my wishes gratified.

I have the most unaffected respect for the energy, the intelligence, and the zeal with which you direct the Department over which you preside; and with the sincerest desire that your exertions may be crowned with success, and that you may enjoy long-continued health and happiness,

I am, sir,

Very respectfully,

Your obedient servant,

THOMAS HENDERSON,

Assistant Surgeon U. S. Army.

JULY, 1840.

33033



P R E F A C E.

DOCTOR THOMAS HENDERSON, the author of this manual, was born in Dumfries, Prince William County, Virginia, on the 6th January, 1789. After completing his professional studies in Philadelphia, he commenced the practice of his profession in Warrenton, Virginia. In 1816 he moved to Georgetown, and thence to Washington City in 1826, where for many years he was the Professor of the Theory and Practice of Medicine, in Columbian College. In 1833 he entered the army as Assistant Surgeon, and for upwards of twenty years he faithfully discharged his duties as a medical

officer. His death occurred on the 11th of August, 1854, in the 65th year of his age.

The favor with which the first edition of this work was received, induced Dr. Henderson to occupy a portion of the leisure moments of his declining years in the preparation of the present improved and enlarged edition, which, having been revised subsequent to his decease, so as to conform to the regulations now in force for the recruiting service, is published in accordance with the known wish of the author, and in the hope that it may guide and assist the recruiting officer and examining surgeon in the performance of their important and responsible duties.

R. H. C.

WASHINGTON, D. C., April, 1856.

ARTICLE I.

ON THE

EXAMINATION OF RECRUITS.

General Considerations.



GENERAL CONSIDERATIONS.

I.

IF there be one point on which, more than on any other, the efficiency of the rank and file of an army depends, that point is the proper discharge of the duties of the RECRUITING SERVICE. By military regulation, this is confided to the *recruiting* line officer and the *inspecting* medical officer. The opinion is entertained by some that these duties consist in a simple routine of almost superficial examination, while others think that it scarcely requires medical scrutiny to select recruits. How this matter is viewed in the military establish-

ments of Europe appears by the following extracts from foreign authorities.

“In a financial, a political, and perhaps, I may add, in a medical point of view, I am not aware of any part of the duty of a medical officer which is of more importance than the inspection of recruits on a large scale, and the examination of inefficient soldiers; and consequently these duties deserve a very careful consideration.”—*Marshall on Soldiers*.

“The duty of inspecting recruits, and of determining whether they are fit or unfit for the military service of the country, is one of the most difficult and responsible that an army surgeon has to perform.”—*Prussian Regulations*.

“The duty of inspecting recruits and conscripts requires the utmost impartiality, skill, and circumspection on the part of the medical officer.”—*Austrian Regulations*.

II.

The constitution of an army, therefore, being manifestly based on the moral, mental, and physical integrity of recruits, military surgeons should be well informed on the subject of enlisting men for service. Reputation for accurate and intelligent discharge of this and every point of duty, is a high consideration with medical officers; and that no motive be wanting to insure the utmost attention, a pecuniary responsibility is here attached, in which the recruiting officers and surgeons are, according to circumstances, involved.

III.

If recruits, or subjects for enlistment, were drawn from those who adopt the profession of

arms from the love of it, or from men stimulated by patriotic motives, the duty of inspection would be divested of much embarrassment that is now inseparable from it. It cannot, however, and it ought not to be concealed that in this country, in time of peace, recruits are drawn from a very different class of men; from the intemperate, the indolent, if not from the vicious. This, and the fact that the proportion of foreigners in our ranks is very great, presenting every variety of *physique* and *morale* for examination, require great circumspection; the more especially as the surgeon is liable to be placed on this duty immediately on entering the service, when he cannot have had the lights of experience. To aid the officers of the medical staff, and to facilitate the purposes of others engaged in the recruiting service, this work is offered, with great deference, for their consideration.

IV.

It is freely admitted that absolute rules to cover every case cannot be precisely given, and it is therefore not attempted here. Nevertheless, many general principles can be advantageously displayed; very many precise topics can be perspicuously designated, and other mooted points settled to the satisfaction and instruction of those without experience in recruiting service.

V.

The writer desires earnestly to attract the attention of the service in all its departments, to the necessity of having a standard work on the subject. This desirable object can

certainly be accomplished; and if this work should contribute even in the remotest degree to that end, it will have done much. Although most striking discrepancies are seen in the results of enlistments at stations and on reinspections at depots in foreign services, growing out of their complicated economy; there is no reason why the same should be met with in our simple system. If exact, full, and uniform instructions are distributed to every officer of the army, the injuries to the service and the pecuniary inconvenience to officers, now so frequent, must to a great degree disappear. When it is clearly and authoritatively laid down what should reject a recruit, harmonious and intelligent action must take the place of what is too often observed when recruits sent from a station, are reinspected at a depot.

VI.

The duties and responsibilities of the surgeon are inferred from the phraseology of the certificate to be signed by him for an accepted recruit.

“I certify on honor that I have carefully examined the above-named recruit, agreeably to the General Regulations of the Army, and that in my opinion he is free from all *bodily defects*, and *mental infirmity*, which would in any way disqualify him from performing the duties of a soldier.”

What many of these *bodily defects* are is comprehensively, and as far as it goes perspicuously condensed in the following paragraph from the Regulations for the Medical Department of the Army:—

“In passing a recruit, the medical officer is to examine him stripped; to see that he has

free use of all his limbs; that his chest is ample; that his hearing, vision, and speech are perfect; that he has no tumors, or ulcerated or extensively cicatrized legs; no rupture or chronic cutaneous affection; that he has not received any contusion, or wound of the head, that may impair his faculties; that he is not a drunkard; is not subject to convulsions; and has no infectious nor other disorder, that may unfit him for military service."

VII.

In the examination of recruits there are, indisputably, causes for rejection discoverable only by professional observation. Such causes are numerous, hence the regulations require medical inspection before the recruit is sworn in. Again, there are other points for which, while the surgeon is not directly responsible,

his suggestions may, with propriety, be submitted to the recruiting officer; fully assured that they will be courteously appreciated. These are now to be noticed.

VIII.

The surgeon is not responsible for the AGE of the recruit. There is, however, much force in the observation "that the complete development of the human body requires an exemption from great fatigue, abundance of healthy nourishment, undisturbed sleep, and tranquillity of mind." As the duties of the soldier are incompatible with these, the surgeon may freely confer with the recruiting officer, touching the enlistment of youths who do not display full physical development; for this development is not likely to improve, either in peace or in war, in the army. In

time of war, the memorable remonstrance of the Emperor Napoleon to the legislature of France should not be forgotten. "Shame on you! I demand a levy of 300,000 *men*; but I must have *grown* men. *Boys* serve only to fill the hospitals and encumber the road-sides." The vast number of junior conscripts that gave out on long marches during the campaigns of the French emperor, and particularly during the march to Moscow, is well known. These boys fought admirably, but they had not that development in which is found the "secret of war"—the power of marching. In a British regiment sent to the East Indies, the mortality among the young men was 38 per cent.; while among those considerably older it was only 17 per cent. Where anything like advanced age exists, but little difficulty arises in the decision by the recruiting officer—as the limit is prescribed.

IX.

The surgeon does not establish the STATURE of the recruit. The minimum is fixed by regulation. Whether stature be regarded in the light of physical ability or of personal appearance, it is left to the recruiting officer. There may be occasions, as where the officer is inexperienced in recruiting, when the surgeon may very properly suggest the unfitness of youths for military service, whose stature is disproportioned to their years. In such, height is gained at the expense of the thoracic development and general proportion, necessary to enable the soldier to endure the fatigues of service, and to carry the weight of accoutrements amounting to more than fifty pounds. It should be likewise recollected that very tall men are the first to give way on marches; and

are more subject to chronic diseases than soldiers not so tall.

A curious fact is stated by Dr. Bell. "The effects," says he, "of a long-continued war are shown even in the next generation, as was the case with the French youths drafted for the army after the general peace. In 1826, out of 1,033,442 young men drafted to serve in the army, 380,213 were sent back because they fell short even of the diminutive stature of four feet ten inches, French measure, about five feet one inch English."

X.

Objections to the MORAL CHARACTER of the recruit are to be made exclusively by the recruiting officer. All *marks of punishment* come under this head; so do the marks of the letter *D*, for desertion, and the letters *H D*,

meaning, habitual drunkard—as also cicatrices on the hip, under the arm, or on the face, that might indicate efforts to remove these brands. The writer has heard it stated repeatedly that the surgeon is responsible for these. As the brand involves neither *mental* nor *physical* disability, it is not so; for while it is proper that, when it exists, the surgeon should call the attention of the recruiting officer to the mark; these officers should recollect that they are in duty bound to attend while the man is being inspected; and that it is at their responsibility if these letters or marks be unobserved. The strictest construction should be placed on the respective spheres of responsibility, to be sustained by the surgeon and the recruiting officer. The latter has not only his own duty to perform at inspection, but to see that the regulations are complied with in every respect.

As other than surgeons may refer to this work, the following case will inspire caution. A man was sent to the hospital for inspection; the recruiting officer was *not* present, and the writer examined and passed the recruit. Two days after, an officer high in rank, met the surgeon with the question, "Have you heard what you are involved in?" and on inquiry the man was found branded with *D* under the left arm. The mark was exceedingly faint, and might well be overlooked.

XI.

Marshall remarks, on the very faint appearance of the mark *D*, in many cases. The writer was informed by a very intelligent and successful recruiting officer, that about the time the above imposition, Par. X., was practised at Madison Barracks, a man who was

inspected by himself and by three sergeants, at Utica, one of whom was a most experienced and vigilant recruiting sergeant, was enlisted. A sharp-eyed soldier subsequently reported that the recruit was marked with *D*, and on examination a most faint impression was found. There can be no doubt from the dates and from the description of the deserter, that he was the impostor in both instances; and the circumstance presents the strongest motive for caution in such cases.

XII.

The surgeon is not responsible for what the regulation terms, the recruit having "*good appearance*," and being "well formed." The military eye and taste of the recruiting officer may be utterly offended with the bad appearance of a man, while the surgeon could find

no fault with his *soundness of mind or health of body*. Men may have unequally high shoulders, wry neck, sway back, pot belly, or bow legs, without the least defect in mental or physical integrity for the duties of the soldier. It is only when these deformities are such as to injure physical health, that they come within the scope of the surgeon's certificate.

A man was inspected. The writer finding him in all respects sound in mind and body, reported favorably; but at the same time showed the recruiting officer that a part of one of the ears had been lost. The man said it had been bitten off in a fight. The officer asked the surgeon whether he could decide whether it had been bitten off or cut off. As the question could not be answered positively, the officer rejected the man on the ground that the injury might be presumptive of bad character; yet the writer would have signed the certificate without the least hesitation.

This case shows pointedly how distinct the spheres of duty are for the surgeon and recruiting officer.

XIII.

It may seem strange that such a point as the race to which the recruit belongs is introduced here; whether negro blood appears. The question can never occur whether the man be white or black; it arises in cases of the offspring of the white man, and of the mulatto woman. But has the case occurred, and is it worthy of note? The writer has been called to the decision of two cases in one year, 1846; one on the northern frontier, the other at Fort Monroe. At the last post a similar case, presented a short time previous. How then shall these approximated castes be distinguished? Not by the formation of the

head, nor by the facial angle; for the negro features are all merged in the mulatto modification. The most conspicuous feature is the hair, which has a very coarse texture. But that coarse hair is frequently seen in undoubtedly white cases. The color of the skin is not more dark than in many unmixed white families in the Southern States, or in the branches of the olive colored (Mongolian or Mauritanian) race seen in all parts of the country. The decision has to be reached, and after submitting such opinion as the aspect of the case justifies, the final decision is left to the recruiting officer. Soldiers would not tolerate the mixed breed as comrades. In the two cases, the question was raised and submitted. At Plattsburg, the man was received and remained in service. At Fort Monroe, after consultation with the commanding officer, the man was enlisted. Some weeks after, a person of respectable standing called on the officer,

and claimed the man as his slave and his son. Not a doubt could be entertained of the credibility of the gentleman who applied for the youth, who was his son by a bright mulatto woman, his slave.

The writer knows of more than one instance of this mixed caste having married into white families. There was no personal sign by which the mixed race could be ascertained; but incidental proof, ultimately adduced, rendered the cases indubitable.*

* One of the best tests in doubtful cases of this kind, is afforded by the appearance of the external organs of generation. I have several times determined questions of doubtful parentage upon the evidence thus afforded, and in every instance the decision has proved correct. The skin covering these organs is much darker in persons having a trace of negro blood, than in the white race.—Ed.

XIV.

As the surgeon and recruiting officer are, by regulation, separately or jointly responsible for the physical and mental integrity of the recruit, it is properly required that both be present at the inspection. The causes for rejection can then be pointed out to the satisfaction of both parties. The following regulation is imperative on the subject:—

“It is the duty of the recruiting officer to be always present at the examination of the recruits, and to see that it be conducted in strict conformity with the regulations.”

In no case where there is the least doubt, should the surgeon examine a recruit in the absence of the officer. Much inconvenience at a rendezvous may be prevented by adherence to this regulation.

XV.

The regulations require the attendance of the surgeon at the rendezvous whenever it is necessary; twice a day at least. Conventional arrangements between the commanding officer and surgeon are made in a liberal spirit, so that the interests of the service and the personal convenience of officers need never be at all incompatible.

XVI.

If the party be attached to the "Recruiting Service," and not at a military post, the medical supplies are obtained from the recruiting service fund. The accounts are presented monthly in duplicate, certified by the surgeon, approved and paid by the commanding

officer. The form for this account is annexed at Note I.

XVII.

Medical officers attending recruiting rendezvous are required to keep a record of all recruits examined by them. Books for this purpose are to be obtained by application to the Surgeon General, to whom they are to be returned when filled. This record is due to the inspecting surgeon in case of difficulty; it is also necessary to the records of the Surgeon General's office for statistical reference.

XVIII.

In examining recruits, the surgeon should deliberately reflect on the duties required of a soldier, as well as the dangers to which he is

exposed. He is liable to frequent and extreme changes of climate; to urgent, unexpected, unseasonable, and dangerous duties in these climates; to great variety as well as privation of food; to be destitute of shelter and comfort at all seasons; and from these and other causes he is heedlessly prone to excessive indulgences, when they are within reach. To sustain him under circumstances thus productive of disease, the recruit should possess *suitable stature, physical energy, sound mind, and quick senses*. From these elements, and from these alone, discipline elicits and then directs *moral courage*, that other requisite for the perfect soldier.

XIX.

The external marks of physical efficiency are thus admirably epitomized in the instruc-

tions for examining recruits in the British service:—

“A tolerably just proportion between the trunk and different members of the body; a countenance expressive of health, with a lively eye; skin firm and elastic; lips red; teeth in good condition; voice strong; chest capacious and well formed; belly lank; limbs muscular; feet arched, and of a moderate length; hands rather large than small.”

The figure of one of the finest soldiers of France is thus described: “His chest was at once broad and deep; his limbs muscular and long; the head small; the flanks thin; the foot and hand well formed.”

XX.

In what classes of men do these elements of a sound physical and mental constitution abound?

Various classes of persons are inspected. Boys and men. Men from the country and men from the cities; men who have been engaged in agricultural and other active rural occupations; and men who have been raised in sedentary habits and pursuits. And here, in justice to the surgeon, it should be remarked, that in this country and in the British service, the fact of voluntary enlistment is a warning that, morally or physically, something *may* be wrong about the recruit. Many offer for service because they are unfit for any other pursuit; rendered unfit by vices that impair the *physique* and *morale*, especially by intemperance. The Duke of Wellington has said of recruits, "that it cannot be denied that in ninety-nine instances out of a hundred, some idle or irregular habit, or even vicious course, is the cause of the enlistment of the volunteer."

In our own country, while the principle

holds good to a considerable extent, that vice makes volunteers, the moral character of recruits is better than in the British service. Let the surgeon, however, be on his guard.

XXI.

The farmer, the hunter, the tender of flocks, the smith, the carpenter, are bred in the open air, in active and laborious occupation, and are accustomed to the winter's cold, and to the summer's sun. The Romans sought in the country for men capable of sustaining the dangers and privations of war, rather than take them from cities, where the sedentary trades abound, that are employed "in the service of luxury." Artisans and manufacturers are not exposed to vicissitudes of weather; are comparatively unaccustomed to exertion, hardship, and fatigue; and are de-

pendent on imaginary comforts, indulgence in which illy fits them for "the business of war." It was Napoleon who said, "Les privations, la pauvreté, la misère sont l'école du bon soldat."

XXII.

Hence, as a class of men, those from the country are to be preferred for the service to those who live in cities. The same amount of bad habits will be less pernicious to one who breathes the pure air of the country, or follows the invigorating pursuits of the farm, or of the chase, than to him who lives in the malaria of unventilated city cellars and hovels, or who works in crowded confined shops. Certain pursuits in the country are particularly favorable to the physical development so

requisite for the soldier; and it is believed that men raised in the country as farmers, are more trustworthy in the service than the town recruit. Dr. Jackson well remarks, "that the hunter and shepherd have the spring of muscle, flexible joint, certainty of step, the strength and keenness of hearing and sight, that make the perfect soldier." Especially are men from mountain regions firm, compact, hardy; possessing activity and enterprise, with the boldness of mind and valor that constitute them natural soldiers. This is finely illustrated in the deeds done in the mountains of Vermont, by the militia under Starke; and in Virginia, by the gallant exploits of the *natural* soldiers, under Shelby and Campbell, at King's Mountain, in the revolutionary war.

XXIII.

The relative capacity of the classes of men now under consideration, to endure toil and the hardships of military life, may be inferred from the fact, that in the Peninsular war, "four out of ten recruits from the *agricultural* population died in a few months, while *six* out of ten recruits from the *manufacturing* districts, died in the same period." Much more than half of the recruits in the British service are from the agricultural class. On these subjects, the valuable and elegant work of Doctor Robert Jackson, the "Constitution of Armies," may be profitably read by the surgeon; while Marshall's Tables show the great difference in the number of town and country recruits rejected from the British service.

The following extract exhibits very forcibly this subject.

“The result was, that the men of from twenty to twenty-one years of age were found the more frequently unfit for the trade of arms, from their stature, constitution, and health, as they belonged to the poorer classes of *manufacturing* laborers. In order to obtain 100 men fit for service, it was necessary to have as many as 343 of the poorer classes; while 193 conscripts sufficed of the classes in better circumstances.”

Sir James McGrigor states that a corps levied in the agricultural district of Wales or the northern counties of England, will last longer than one recruited from the manufacturing towns of Birmingham and Manchester, or from near the metropolis. Out of 613 men enlisted, almost all of whom came from Birmingham and five other neighboring towns, only 238 were approved for service.

As yet the circumstances affecting these classes of persons do not prevail to very great extent in this country. Yet they are observable; and have on a recent occasion been conspicuous in a regiment principally composed of mountain men, farmers and those who lived in the country; while some companies drew largely on the cities for their men—and drew vastly inferior men.

XXIV.

Boys are enlisted to serve as *musicians*. While all due precautions are taken, yet as deception is not to be expected from them, and as their duties are not so arduous, the severe scrutiny that men require is not necessary in their examination.

Men are enlisted to serve as *musicians*. For this purpose recruits may be passed who, as

soldiers, would be rejected. The duties of the musician being peculiar and comparatively light, especially as they do not carry the musket and its appliances, the perfect *physique* necessary for the soldier is not required.

Cadets are inspected on admission to the military academy; and are reinspected after graduation, to ascertain their physical fitness for the duties of commissioned officers.

At first view it might be presumed that, if able to go through the academic course of mental and physical pursuits for four years, it would be evident thence that they were, in all respects, fit for army service. To this generally just inference there are exceptions that require the decision of medical judgment. The health of some youths is so injured in the process of time, or in the course of studies, as to disqualify them for commissions; and these render a final examination a matter of justice to the service. Some peculiar points in the

first inspection of the *cadet* present matters of interest.

In the inspection of these youths no physical, mental, nor moral deterioration is to be anticipated from the previous indulgence in that great evil, the abuse of intoxicating drinks.

The age of the *cadet* precludes the supposition of the full physical power necessary for the soldier ; and the duties of the *cadets* are wisely adapted to their age. But while actual manly development is not to be looked for so early in life, the evidence of capacity for subsequent expansion of physical energies should be well established by the surgeon. In the general form; in thoracic proportion; in the size and flexibility of the limbs and joints; in the degree of muscular swell; in the texture of the skin; in the preponderance of red tissues over white; in the countenance, as expressive

of vivacity and intelligence ; in all these there is scope for professional scrutiny. In most doubtful cases the surgeon can safely give the youth the benefit of the doubt ; for the discipline and duties of the academy eminently favor the development of physical power, where there is even a moderate amount of inherent constitutional stamina. Especially, as the great object of the school is to form the military mind, it is requisite to attend carefully to the mental powers. So that, while no artificial standard interferes with the claims of vigorous mental *material*, though uncultivated, the surgeon may have every assurance, that there is no incapacitating defect in the amount of that material.

Men are inspected for the ordnance department. There are some objections that apply to enlistment for the line, that constitute none to pass an ordnance laborer. These will

readily present themselves as the cases arise. They relate chiefly to personal appearance, and to circumstances that do not affect mere physical strength.

XXV.

Men are enlisted to serve as hospital stewards. Next to appropriate physical qualities for their duties the primary consideration is moral character; after this the requisite general and professional education. Medical or pharmaceutical qualifications, however eminently desirable, are not essential; as the surgeon will train the man to his special duties.

“When a suitable hospital steward cannot be got from the command, the medical officer may recommend a qualified person to the commanding officer to be enlisted. When so

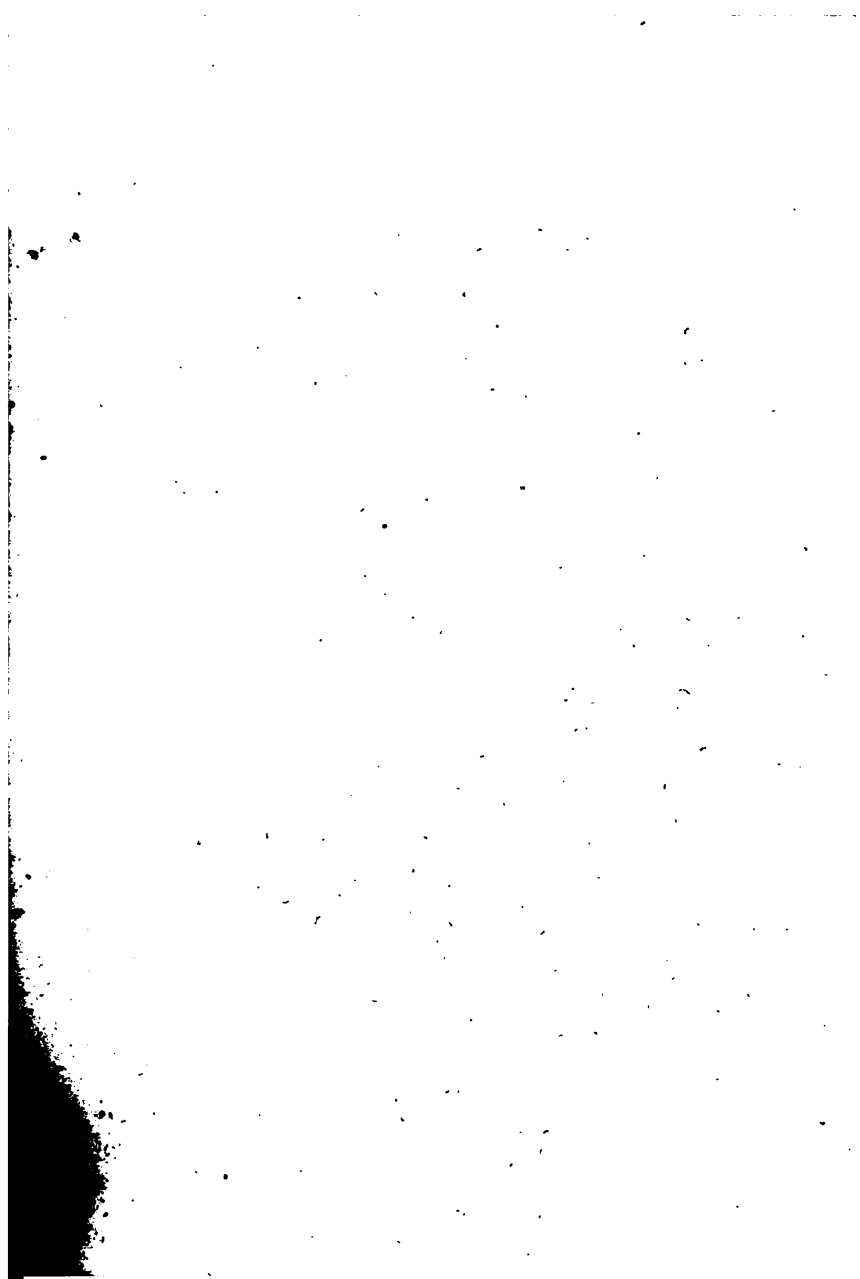
enlisted, he must be borne on the roll of some company." Par. 29. *Regulations for the Medical Department of the Army*, 1856.

XXVI.

Soldiers offering for *re-enlistment* have some peculiar claims to the attention of the surgeon. Men may close an enlistment with some defects that would exclude them as recruits, but which having been found compatible with the discharge of their duty, ought to be overlooked. *Old soldiers should never be refused by the surgeon, although disabling infirmities may have crept on them in the course of long service*; the more especially if they have no disqualifying moral traits. It is confidently hoped that this interesting and respectable class of men will ere long be inmates of an institution, suitable

to their claims on the country in whose service they have spent their lives, and exhausted their capacities for self-support.*

* This hope has been realized in the establishment of military asylums.—ED.



ARTICLE II.

ON THE

EXAMINATION OF RECRUITS.

Routine of Inspection.



ROUTINE OF INSPECTION.

OBSERVATIONS ON THE VOLUNTARY AND INVOLUNTARY SYSTEMS FOR RECRUITING ARMIES.

THE severe scrutiny to which recruits are subjected in Europe, grows out of circumstances in which this country has not yet been placed. We are strangers to the "Conscription." European armies have, during their last long wars, depended on requisitions so extensive, that it has been necessary to prescribe the examination of conscripts so keenly, as to preclude the possibility of escape from a tour of service.

The security of society requires that a certain

amount of male population should always be left to raise food, to protect the helpless, and otherwise provide for the well-being of civil life. The amount of this population taken for the purposes of war, depends somewhat on the nature of a contest, and the extent to which it involves the safety of the country. In ordinary wars, the voluntary system may suffice; under other circumstances, legal conscription or involuntary levies are made or required. As a determinate order of physical force is necessary to constitute a well-appointed army, and as a class not efficient for military service, but fully adequate to social and civil wants, always exists, governments have resorted to legal selection to fill their armies, when emergencies call for more than is afforded by voluntary enlistments. In various countries, various considerations are adopted, such as youth, age, and infirmities physical and mental, as disqualifying for military service—while as differ-

ently constituted authorities exercise the necessary discriminative functions in the matter of these disqualifications.

The system applicable to involuntary levies has been carried in France, under Napoleon, to a degree of perfection not likely to be excelled, either for accuracy or for justice to the State and to the conscript. It must be acceptable to the surgeon to have that system always at hand for reference, as it suggests every principle that is involved either in the involuntary or the voluntary enlistment. And although the rigorous application of the "*Code de la Conscription*" may not be called for in our land in our day, yet it develops in precise and perspicuous terms most useful matters for reflection to every man who professionally examines a recruit.

The "*code*" requires that when a conscript pleads inability to do a tour of military service, he must,

1. Procure a certificate from a health officer to that effect;

2. With this certificate he goes before, what is termed, the *municipal administration* where he resides;

3. He is then examined by a health officer in the presence of this *municipal administration*;

4. Before he can be excused from service, the decision of the *municipal administration* must be considered and approved by the commissioner of the executive directory;

5. If the *municipal administration* deem themselves incompetent to decide on the case, the conscript is carried up to the *central administration*. The *municipal administration* can only decide finally on palpable infirmities; then:

6. All *municipal* decisions must go for further examination to the *central administration*; from whence they are finally

7. Referred to the *Minister of War*.

In the army of the United States, where the voluntary system prevails, this duty of deciding on the efficiency of the recruit depends on an examination by one military surgeon. In order to have a full view of the whole difference between the conscription and the voluntary enlistment, it will be remembered that, in the conscription or involuntary system, the object of the recruit is to escape from service by the exhibition of infirmities that may or may not exist; while, in the voluntary system, the design of the recruit may be, and frequently is, from a desire to seek subsistence in the service, to conceal disqualifying defects.

The "*Code de la Conscription*" includes two classes of infirmities: 1st. Those that are so palpable as to be left to the decision of the *municipal* administration. 2d. Those that from less obvious characters are carried up to the *central* administration.

I. SYNOPSIS OF INCAPACITIES FOR MILITARY SERVICE DECIDED ON BY THE MUNICIPAL ADMINISTRATION.

1. Total loss of sight.
2. The total loss of the nose.
3. Dumbness; permanent loss of voice; complete deafness.
4. Voluminous and incurable goitres, habitually impeding respiration.
5. Scrofulous ulcers.
6. Confirmed pulmonary consumption.
7. The loss of the penis or both testicles.
8. The loss of an arm, leg, foot, or hand; the incurable loss of motion of these parts.
9. An aneurism of the principal arteries.
10. The curvature of the long bones; rickets and nodosities, sufficient evidently to impede the motions of the limbs. Other diseases of the bones, although great and palpable, are sometimes liable to doubt, and therefore are

reserved for the judgment of the central administration.

11. Lameness well marked, whatever be the cause, which must be precisely stated. Considerable and permanent retraction of the flexor or extensor muscles of a limb, or paralysis of these, or a state of relaxation impeding the free exercise of the muscular movements.

12. Atrophy of a limb, or decided marasmus, characterized by marks of hectic and wasting, which should be stated in the report.

Where there is reason to doubt the extent to which these disqualifying causes exist, the *municipal* is required to leave solution of these doubts to the *central* administration.

II. SYNOPSIS OF DISEASES OR INFIRMITIES
WHICH OCCASION ABSOLUTE OR RELATIVE
INCAPACITY FOR MILITARY SERVICE, AND
WHICH REQUIRE THE DECISION OF THE CEN-
TRAL ADMINISTRATION.

1. Great injuries of the skull, arising from considerable wounds or depression, exfoliation or extraction of the bones. These sometimes occasion all, but commonly several of the following symptoms. Disturbance of the intellect, giddiness, swimming in the head, drowsiness, nervous or spasmodic symptoms, frequent pains of the head.

2. The loss of the right eye or of its use. This defect disqualifies a man for serving in the line, but does not prevent him from being useful to the army in other services, or in the marine.

3. Fistula lachrymalis; chronic ophthalmia or frequent rheums in the eyes, as well as

habitual diseases of the eyelids or lachrymal passages, of such a degree as obviously to injure the powers of sight.

4. Weakness of sight ; permanent defects of vision, which prevent objects from being distinguished at the distance necessary for the service of the army ; short-sightedness ; night-blindness ; confusion of vision. These affections of the sight are often difficult of decision, and it is recommended to ascertain the effect of glasses on persons complaining of near-sightedness. Nyctalopia is rare in youth, and often only temporary ; while amblyopia, or confused vision, may be known with some certainty, when the pupils have changed their diameter, or when they have lost somewhat of their mobility or regularity. This, however, is not always present ; and in doubtful cases it is directed that the testimony of ten individuals, not relatives of the appellants, should be brought to affirm the existence of these defects.

5. Deformity of the nose, capable of impeding respiration to a considerable degree ; ozæna and every obstinate ulcer of the nasal passages or palate, caries of the bones, and incurable polypi.

6. Stinking breath from an incurable cause, as well as fetid discharges from the ears; and habitual transpiration of the same character, when incurable.

7. Loss of the incisive and canine teeth of the upper or under jaw ; fistulas of the maxillary sinuses ; incurable deformities of either jaw by loss of substance, necrosis or, other cause hindering the biting of the cartridge, impeding mastication, or injuring speech. A person without canine or incisive teeth cannot be a soldier of the line, but may be employed in other services.

8. Salivary fistulas, and the involuntary flux of saliva, when incurable.

9. Difficulty of deglutition, arising from

paralysis, or some other permanent injury or incurable lesion of the organs employed in that function.

10. Permanent and well established diseases of the organs of hearing, voice, or speech, considerable in degree, and capable of materially impeding their use. As these diseases are very doubtful, and may frequently be simulated, it is advised that testimony proving their existence should be obtained, and the examination should also be repeated for several months, at stated periods. An absolute or definite exemption need not be given, as they yield to time and skill.

11. Ulcers and tumors of a decidedly scrofulous nature. The symptoms of a scrofulous cachexy, if there be any, should be stated.

12. Deformity of the chest; or crookedness of the spine, sufficient to impede respiration,

and to prevent the carrying of arms, and military accoutrements.

13. Phthisis in the first degree; confirmed asthma; and habitual, frequent, and periodical spitting of blood. The state of patients attacked with these diseases, is evidently bad, and accompanied by circumstances which leave no doubt; they then admit of an absolute dispensation. Sometimes they are less decided, when only a provisional judgment is to be given.

14. Irreducible hernias, and those which cannot be reduced without danger.

15. Stone in the bladder; gravel; habitual incontinence, or frequent retention of urine, as well as severe diseases, or lesions of the urinary passages; fistulas of these parts, whether incurable, or requiring constant medical assistance. In a note it is remarked, that retention of urine produces well-known symptoms, which will guide to a knowledge

of the true state of the case. Incontinence may be simulated with less danger of detection; and apparently in order to avoid the advantage that might be taken of this, it is directed, that if the young man has in other respects a healthy and vigorous look, he may be sent to the army without any inconvenience.

16. The permanent retraction of a testicle; its strangulation in the ring; sarcocoele; hydrocele; varicocele; all severe affections of the scrotum, testicles, or spermatic chords, known to be incurable.

17. Ulcerated hemorrhoids; incurable fistula in ano; periodical and incurable hemorrhoidal flux; habitual and chronic flux of blood from the intestines; habitual incontinence of fæces; habitual prolapsus ani. These ought to be stated by able health officers, who have for a length of time, treated and observed the patient; and a provisional dispen-

sation is only to be given until their incurability is established.

18. The total loss of a thumb or great toe, of the forefinger of the right hand, or two other fingers of one hand, or of two toes of one foot; the mutilation of the last joints of one or several toes or fingers; the irremediable loss of motion of these parts. These, although they interfere in different degrees with several parts of the infantry service, do not unfit for other duties, such as miners, sappers, pioneers, or even for cavalry duty, if the mutilation of the toes or right hand be not considerable. If, therefore, the petitioner, on account of any other mutilation than the loss of the thumb, is in other respects strong and of a robust constitution, he ought to be sent to the army.

19. Incurable deformities of the feet, hands, limbs, or other parts, which impede marching, or handling of the arms, or carrying the ac-

coutrements, or the free motion of any weapon. These may produce only a relative invalidity, and hence the physical effects arising from them should be stated.

20. Large and numerous varices.

21. Cancers and ulcers, which are inveterate, of a bad character, incurable, or whose cure it would be imprudent to attempt. The state of body accompanying them should be mentioned.

22. Large and old cicatrices badly consolidated, especially if they have adhesions, and are accompanied by the loss of substance, covered with crusts, or attended with varices.

23. Severe diseases of the bones, such as diastasis, or separation, ankylosis, caries, or necrosis, spina ventosa; osseous tumors, and those of the periosteum, when considerable, or situated so as to impede motion, and which have been treated without success.

24. Diseases of the skin, when they are

capable of communication; when they are old, hereditary, or obstinate, as tinea; acute, moist, and extensive herpes; obstinate and complicated itch; lepra. In all these cases, a definitive dispensation cannot be granted, until after methodical treatment by very intelligent officers of health has been continued in vain, or unless the constitution of the patient be obviously injured.

25. Decided cachexy, of a scrobutic, glandular, or other nature, known to be incurable, and characterized by evident symptoms of long standing; dropsies, known to be incurable.

26. Debility and extreme attenuation, joined to a diminutive stature, or to a very tall one, out of the ordinary proportions. This case requires great judgment in deciding on it; and it is advised to adjourn the decision from quarter to quarter. "When a conscript has grown very rapidly; when he is tall, lean,

and slender made; when he has long neck, arms, and legs; when his breathing is difficult from the least exercise; such an individual is out of the question, until nature has added in strength what it has hitherto confined to stature."

27. Gout; sciatica; inveterate arthritic and rheumatic pains, impeding the motions of the limbs and trunk. If these are present in an acute form, the conscript has a right to a provisional dispensation; but if they be chronic, particular attention should be paid to the condition of the parts. Gout seldom arrives to a high degree of obstinacy, without leaving nodosities and sensible contractions; while protracted rheumatism alters the form of the muscles and color of the skin, and causes a wasting of the part affected. The surgeon is warned, in cases where no sensible appearances prove the existence of rheumatism, not to mistake a feigned, for a real disease;

and the following acute remark is added: "As it is but just that in some other equivocal cases, such as those respecting diseases of the breast, humanity should incline to the conscript's side; so with respect to pains and rheumatism which are not proven, it is equally proper to prefer severity to indulgence; as military exercise, far from aggravating the predisposition, if it exist, will only contribute to remove it."

28. "Epilepsy; convulsions; general or partial convulsive motions; habitual trembling of a whole body, or of a limb; general or partial palsy; madness and imbecility. The surgeon, in this class of cases, is to be particularly careful not to be deceived by a simulated disease."

The necessities of a state reduced to a conscription, require classes of men whose physical capacities, though not perfect, are adapted to various spheres of military duty. Men are

taken for garrison duty; for foot service; for cavalry duty, and for ordnance, and the sapper and miner corps. The most complete physical condition is required for foot service; next for cavalry; and there are some disqualifications for these that do not apply to the others mentioned. These have been alluded to in the synopsis of the "Code" above copied. In foreign services, a distinct or precise allusion is made to the cavalry and foot services. "A recruit even considerably in-kneed; or with cicatrices from previously ulcerated legs; or who has lost a great toe; or who has moderately deformed feet from flatness, or other causes, may be received for mounted service, though unfit for infantry. In garrison service, moderate hydrocele; varices of the legs, if not aggravated; a slight contraction of the elbow joint; shortness of one of the lower extremities, provided the defect can be remedied by means of a high-heeled shoe; inguinal

or femoral hernia, if retainable by a truss; loss of any finger except the thumb, and slight traces of scrofula, do not disqualify."

In services where the voluntary enlistment supersedes the conscription, it has not been found necessary to draw these distinctions, as the desire to enlist, *not to avoid conscription*, presents such an amount of good material, that the responsibility of the surgeon lies in discovering concealed defects. Hence, causes of rejection are much more readily laid down than in the conscription. It is where effort is made to leave the service, or to obtain pension, that the system laid down in the "Code de la Conscription," will aid in the detection of pretenders.

To complete this part of the subject, "The Instructions for examining recruits" in the British service are here given. These instructions are considered, by the highest military authority in that service, to be quite deficient,

inasmuch as they contain "little or nothing to guide the medical officer in dubious cases."

1. Feeble constitution; unsound health from whatever cause; indications of former diseases, as leech-bites, traces of blisters, thereby showing a liability to infirm health; nodes, glandular swellings, or other symptoms of scrofula.

2. Weak, or disordered intellect.

3. Chronic cutaneous affections, especially of the scalp.

4. Severe injuries of the bones of the head.

5. Impaired vision, from whatever cause; inflammatory affections of the eyelids; immobility, or irregularity of the iris; fistula lachrymalis, &c. &c.

6. Deafness; copious discharge from the ears.

7. Loss of many teeth, or the teeth generally unsound.

8. Impediment of speech; stammering.

9. Want of due capacity of the chest, and

any other indications of a liability to pulmonic disease. Disease of the heart.

10. Impaired or inadequate efficiency of one or both of the superior extremities, on account of palsy; old fractures, especially of the clavicles; contraction of a joint; mutilation; extenuation; deformity; ganglions, &c. &c.

11. An unnatural excurvature or incurvature of the spine.

12. Hernia, or a tendency to that disability from preternatural enlargement of the abdominal ring.

13. A varicose state of the veins of the scrotum or spermatic cord. Sarcocoele, hydrocele, hemorrhoids, fistulæ in perineo.

14. Impaired or inadequate efficiency of one or both of the inferior extremities, on account of varicose veins, old fractures, malformation, palsy, or lameness, flat feet, contraction, mutilation, extenuation, enlargement,

unequal length, bunions, overlying or supernumerary toes, ganglions, &c. &c.

15. Ulcers, or unsound cicatrices of ulcers likely to break out afresh.

16. Traces of corporal punishment. This is an unqualified cause of rejection in regard to recruits.

17. Diseases, whether acute or chronic, for which medical treatment is required.

XXVII.

Inspection of recruits is to be done only in the daytime. The reasons for this need not be given. If emergencies require a departure from this rule, they constitute only exceptions to its general applicability.

XXVIII.

The army regulations imperatively require that the recruit be sober when enlisted; and the surgeon should positively ascertain that the man is sober at the time of inspection.

XXIX.

The man must be naked when inspected. When an adult objects to this requisition of nudity, let the surgeon be the more critical in examination. Youths and boys sometimes object to being stripped, from a sense of delicacy: but, if kindly informed that the regulations are imperative in requiring all to submit to it, and that the inspection will be soon done, there will be no difficulty. Abruptness

on the part of the surgeon may drive away a good recruit.

The inspection should be made only in the presence of the recruiting officer and his sergeant. The man's feet and person should be washed before he is brought in for examination.

The following circumstance shows the necessity for having recruits stripped:—

Recently a volunteer regiment was inspected, previous to being mustered into service, under instructions that the surgeon should not have the men naked when examined. Yet, by this incomplete mode, about forty out of near one thousand, were rejected. It was stated at the time by the medical officer, that, from the variety of causes for rejection not to be ascertained by the mode of inspection, a considerable number would be found unserviceable on taking the field. This regiment was concentrated at a military post,

preparatory to embarking for the seat of war ; where severe general sickness threw a great many into hospitals, and where, in numerous cases, causes for rejection were discovered, and the men discharged. Soon after taking the field in Mexico, numbers of the men were found unfit for service ; and the surgeon who inspected the regiment in the first instance, was not surprised to see a well-written letter from the army, in which it was said, "the mustering officer should have had that regiment *better inspected.*"

A short time since, a detachment of recruits for the same regiment, was brought into garrison. Having no special instructions with regard to their inspection, the commanding officer directed that they should be examined according to army usage. On stripping the men, *one-fifth* were found utterly disqualified for service ; and for causes not discoverable without having the men naked.

XXX.

Before the recruit is stripped, there are certain particulars of which the surgeon should be well satisfied. He can so conduct conversation and questions, as to ascertain the man's *mental* capacity. Difficulty often occurs here; for many recruits answer questions readily, nay smartly, at inspection, who, in the details of service, are, to all military intents and purposes, little better than idiots.

Give scope and variety to questions, so as to test mental readiness and vivacity. Mark the formation and size of the head, and of the facial angle; attend also to the expression of the countenance. Examine the cranium for depression of the bones. A flabby, leucophlegmatic habit, and a dull, stupid mind, often go together. It frequently requires much tact to decide on the man's intellectual

fitness for service ; and the writer speaks from observation, in saying, that imbecility of mind is too often overlooked.

XXXI.

Then institute cautious inquiries as to previous health.

Has he been subject to convulsive affections, or to epilepsy ? If his appearance gives reason to suspect it, ask when he had the last attack. In this way the writer has detected epilepsy. Usually the only evidence in these cases, is the declaration of the person ; for it is settled by the best authorities, that there are no signs, by which the previous existence of epileptic affections can be detected. Suspicion of intemperate habits leads to the probability of convulsions. So far as the responsibility of the surgeon goes, they are occult.

XXXII.

Inquire for fractured, or otherwise injured limbs, or joints; and if he has had attacks of pneumonia (inflammation of the lungs), or pleurisy. Put the general question distinctly, Have you suffered from, or are you now laboring under any ailment whatever? If a man discharged soon after enlistment, on account of disease existing at the time of enlistment, be asked why he did not inform the officer of it, the invariable answer is, "the surgeon did not ask me about it." In foreign services, it is inserted in the medical certificate, that the recruit affirmed his being in good health, in all respects, when he was attested.

XXXIII.

It is exceedingly important to establish the signs of habitual intemperance; because of their intrinsic importance, and because they give reason to suspect the existence of other affections, such as liver disease, fistula ani, hemorrhoids, convulsions, &c. &c.

The eye of the drunkard is more vascular, or turgid with red vessels, and the lids are puffed. The face is red, or bloated, particularly the nose and cheeks; then, there are the *acne rosacea*, or *grog blossom* eruption; the furred tongue, from continual gastric and hepatic excitation; the well-known breath of the habitual toper; the tremor and attenuation of the limbs; the lower extremities sometimes tumid. These are all evidences of functional disorder, if not of organic lesion, of shattered nervous system proceeding, in most instances,

from drunkenness, and on them the man should be rejected.

The surgeon will, as guardedly as readily, distinguish that excited state in which many recruits appear at inspection, after a recent debauch, from the above enumerated, and other indications of the hard drinker. The one group of signs establishes habits; the other, incidental excess.

XXXIV.

Besides the marks of constitutional depravity from intemperance, there are others of weak health, that should never be overlooked. In searching keenly for special objections, or local vices, general debility and infirm constitution are sometimes disregarded. The writer has repeatedly seen this; and it is proper to

detail the most usual marks of the most ordinary cause, the *scrofulous* habit.

The hair is commonly, but by no means uniformly light; the skin soft, fair, with the blue veins seen distinctly through this thin integument, and on the skin of the chest are often observed the marks of cupping and blisters; also cicatrices about the neck, and the scars of the lancet from repeated venesection. The complexion pale or sallow; the eye blue, or light; the white of the eye pearly; the eyelids frequently red on the edges and gummy; the breath fetid, and occasionally the upper lip tumid. There is the narrow chest, or chicken breast; the voice thick and slightly hoarse; the arms long and slender; the abdomen, if tumid, is so at the lower region; the thighs and legs with slender muscular development; the joints small. Withal the mind is spirited, sprightly, and intelligent, and the man confident of physical capacity.

Need it be said that such men should never be enlisted. Yet the writer has repeatedly thrown such cases before Boards of officers for rejection.

The marked difference between this group of signs of constitutional infirmity, and those from habitual intemperance, cannot fail to strike even the recruiting officer. The predominance of white tissues and fluids in this scrofulous habit, is sometimes most remarkable. In the case of a recruit, sent to headquarters of the regiment for reinspection, the writer asked the man what bleached him so thoroughly? The reply was, "I have always lived at in-door work." He was, of course, rejected.

XXXV.

Now, look at the whole physical man. At his form, at the size, length, and symmetry of

limb, with their general proportions. Make him take the position of a soldier, face about, then stand for a profile view of his figure. Let him walk, or, if necessary, run across the room, to test his limping, and the flexibility of the joints. Make him stand first on one foot, then on the other, and kneel alternately on each knee. The arms should be thrown in all directions of motion; as flexion of the joints from the shoulder to the finger; then extension, rotation, circumduction, the arms raised over the head, and the backs of the hands made to touch there.

XXXVI.

The joints should be large or fully developed, to insure endurance of toil in marching. "Large joints, prominent, bony pro-

cesses, swelling muscles, rough and elastic integuments, mark the fine recruit."

Then see that the man stands well on his haunches; that the spine, without curvature or any distortion, has abundant mobility; that he is not round shouldered, nor with conspicuously unequal height of shoulders; that there are no sprains, nor effects of sprains; that, in all positions, the chest is capable of free expansion; so that, under all these various movements, exertions, and postures, there is neither cough, short nor hurried respiration, nor undue frequency nor irritability of the heart, as manifested in the pulse.

XXXVII.

Some recruits are so offensive in their breath, and cutaneous excretions, as to be in-

tolerable to their comrades; and, for these causes, are discharged from the French service, and ought, unquestionably, to be rejected from any army.

XXXVIII.

These observations on the general health, on mental integrity, on the bony framework, and on muscular development, being satisfactory, the surgeon next takes into consideration the parts and organs of the body, in regular succession. This special observation should be so habitually practised, as to reduce it almost to mechanical routine. Nothing will then be overlooked; and this is especially necessary where a number of recruits are daily inspected.

XXXIX.

Examination of the recruit in detail commences, very properly, with the senses of sight and hearing.

OF VISION.

It is essential that the recruit should have the functions of both eyes perfectly. In the casualties of service the soldier frequently loses one eye; this is tolerated, as the man should not be discharged for it; but, with the recruit, the rule that both eyes be perfect is imperative. To ascertain this, examine the eyes closely; test the vision of each separately, by holding small objects at a distance, and at various distances.

The *myopic* (near-sighted) man is known by the convexity of the eye; by testing vision with a small object, seen by others distinctly

at an ordinary distance, and by the facility afforded by glasses. In France, seven per thousand are exempted from this cause.

Nyctalopia (day-blindness, with night vision) is also an objection. When idiopathic, both eyes are equally affected; and this fact may lead to its determination. It can seldom be otherwise ascertained, than by the statement of the man.

There are several opacities not only perfectly familiar to the surgeon, but which can be easily detected by the recruiting officer. There is the *cataract*; the *leucoma*, or scar on the cornea; the *albugo*, or deposition of opaque matter between the layers of the cornea; the *cicatrix on the iris*, obliterating, or materially affecting the *form* or *size* of the pupil; and the *nebula*, or speck on the membrane exterior to the cornea. These lesions all produce a conspicuous blemish on the grape, as it is commonly called, of the eye; and though the

recruiting officer be not competent to distinguish them anatomically, yet, seeing a defect, he is led to test the power of vision, so as to satisfy himself that the organ is, or is not healthy. The writer has recently thrown before a Board of officers for reinspection, a man, whose eye, at the first glance even of a recruiting officer, must have been pronounced totally blind. The triangular excrescence of the conjunctiva (white of the eye), called *pterygion*, which is seen chiefly at the inner angle of the eye, rapidly increases and impairs vision.

All these affections are absolute objections to the recruit.

Be careful to observe that the iris denotes due sensibility, by the dilation and contraction of the pupil, on exposure to different degrees of light; and attend to the form of the pupil.

Strabismus (squinting), if to a great degree, impairs vision, and is a deformity; in a two-fold sense justifying rejection.

Look well to the state of the *tarsi* (eyelids), that they are free from redness or chronic inflammation; that there is no chronic suffusion, or vascular congestion of the *albuginea* (membrane over the white of the eye); that there is no *fistula lachrymalis*, in which the tears, instead of trickling into the nose, are thrown out on the cheek, from obstruction of a duct.

So much for the absolute importance of the perfect sense of vision.

XL.

OF HEARING.

Nor is it less essential, that the recruit should have quick and perfect hearing.

The external *meatus* (passage into the ear) should be well examined for ulceration, discharge of matter, or morbid accumulation of the secretion of the part. Speak in low tones,

at different distances, to be assured of the keenness of this sense. There is a deafness occasioned by closure of the *Eustachian tube* (passage from the back of the mouth to the ear); and this affects the voice of some very remarkably.

XLI.

In examining the HEAD, ascertain if there be *tinea capitis* (scald head) on the scalp. This disease is always disgusting; frequently destroys the hair; in adults is very obstinate, if not incurable; is liable to return, when apparently cured; is in some forms contagious; and is often connected with scrofulous habit. These are insuperable objections. The disease is reputedly more tractable before puberty, and in boys, if slight, may not be an objection; but if of long standing, and if

there be, in the parent or child, any marks of scrofula, the boy should be rejected.

The *cranium* (skull) should be closely felt with the fingers, to find out depressions of the bones. Extensive depressions are inadmissible. If the inner table of the skull be certainly free from depression, of which the surgeon only can judge, that of the outer table need not be regarded. Nor should the man be rejected, if he has natural aspect, without wildness of eye, or irregularity of manner, and with every appearance of good health. These depressions are used by crafty men, in feigning convulsions, or occasional insanity. If there be any reason to question moral character, the surgeon should state these things to the line officer.

Exfoliation of the bones of the skull, and *nodes* thereon, are to be viewed in connection with the general health. They may proceed

from uncomplicated inflammation of the *pericranium* (membrane that covers the bones of the skull), or from secondary syphilis, from the abuse of mercury, or from scrofula. If the health be vigorous, and if there are no nodes on the limbs, nor cicatrices elsewhere, nor other marks of constitutional hurt, there is no objection to enlistment. The same use is made by artful men of these injuries, to obtain their discharge from service, as of the depressions in the bones, spoken of above.

XLII.

Disease of the bones of the Nose is a positive objection—the causes usually are scrofula, syphilis, or mercurial irritation. Not less objectionable is that entire loss of the bones of the nose, that occasions remarkable deformity.

Ozaena is a most offensive affection of the nose, accompanied with fetid discharge, and frequently attended with *caries* of the bones. The discharge has such fetor, as to be compared to that of a "crushed bed-bug;" and it is constant. With this the man should not be enlisted.

Polypus of the nose, which is detected by the voice, by making the man press on one nostril, and at the same time attempt to blow or breathe through the other, and by the watery discharge from the nose, is a valid objection.

XLIII.

Hare-lip—where speech is affected; where there are clefts in the bones of the jaw or palate, or where there is loss of teeth, is an absolute objection. But where an otherwise

unobjectionable, or a positively valuable man offers, and if the injury be confined entirely to the lip—and where the circumstances of the case and of the service are favorable for the simple operation, the writer would receive the man, perform the operation; and as effectually remove all incompatible deformity, as if the lip had been accidentally divided by an incised wound.

XLIV.

Extensive loss of *teeth*, particularly the incisors (front teeth), is good cause for refusing a certificate. The teeth should be amply sufficient for healthy mastication, and for distinct enunciation. The front cutting teeth are especially necessary to tear the cartridge. So important are they, that it is quite common in foreign services for conscripts to knock them

out; thus disqualifying themselves for military service.


There is generally some constitutional cause for an extensive loss of teeth; and this is most frequently the abuse of mercury in syphilis, in fever, or in forms of scrofulous, or other chronic disease. The general health should be carefully regarded in these teeth cases.

XLV.

Stammering, unless quite slight, is an objection. The voice should not only be entirely unimpeded, but enunciation be clear, distinct, and strong; and for this no reasons need be specified. Yet the writer has seen a man in service, who, besides *squinting* to a deformity, had a stammering that rendered him almost unintelligible in ordinary conversation.

XLVI.

Scrofulous; or other *cicatrices* (scars), as they are usually conspicuous on the neck, are noticed here. Under some circumstances, but not always, they are valid objections.

If these *cicatrices* are anti-pubertal;  have been a long time healed; if they create no deformity; and, especially, if the general health be well established, they are not insuperable objections. Such scars prove that the scrofula has, long since, spent its force on the external glandular system, leaving the internal organs unimpaired. Judgment, and not prejudice, should bear on these cases; and the opinion here expressed is the result of long and extensive observation. Anything like feeble health, or *cicatrices* from recent ulceration present a case totally different. The

writer has acted on these views in passing recruits, and without cause to regret it.

XLVII.

Marks of punishment, as they denote moral deficiency, should be pointed out to the commanding officer for his decision. Universal authority in such matters determines, that no man with marks of punishment should be enlisted.

XLVIII.

Scabies (itch), is so readily cured; and, by a prompt use of its specific is so certainly kept from spreading; that there ought to be no hesitation, *in garrison*, to pass a recruit with it; provided the disease is not *pustular*, or of long standing.

XLIX.

The writer dissents from the opinion, unqualified, that men who have *gonorrhœa* should not be enlisted. Regard should be had to the form of the disease, and the circumstances of the service. If it is simple *gonorrhœa*, and the recruit be not immediately destined to the field, receive and cure him. But if the case be accompanied with swelled testicle, a high urethral inflammation, or with enlarged inguinal (groin) glands, the man should be rejected.

L.

The existence of *chancre* is a valid objection to a recruit.

If a man apply for re-enlistment, who has

chancre, no objection need be made, unless the ulcer be in an unhealthy form.

Secondary syphilis, in any form, is a positive objection. This is a constitutional, chronic, and often incurable disease; entirely different from the local, acute, and tractable case of chancre just stated.



LI.

For all physical purposes the capacity of the *thorax* (chest) is of great importance. The surgeon must observe all departure from ample development with much care. He should take a lateral, as well as front and back view. The antero-posterior diameter ought to be at least six inches at the lower part of the sternum; and the chest should measure round full thirty-three inches, with ample clavicular spaces. No recruit should

be passed without careful measurement. When the antero-posterior diameter is less than seven inches, the general health must be critically considered. Make strict inquiry as to any hereditary scrofulous taint, or predisposition to pulmonary consumption. The local indications of tubercular deposition are cough, hurried respiration, with accelerated pulse; and the general marks of scrofulous diathesis have been given in a former paragraph. The use of the stethoscope will remove all doubt.

The thorax is sometimes enlarged by effusion into one of the cavities; or contraction of one side may have arisen from adhesion after pleurisy. The cartilage at the end of the breast-bone is sometimes turned inwards, so as to make a remarkable depression; but this may not affect the capacity of the thorax for the expansion of the lungs.

The writer certainly does not draw too

largely on the intelligence of the recruiting officer, in supposing him capable of forming correct judgment in these cases of thoracic defect. Observations of the human form derived from classic models, as well as from ordinary subjects—nay, it may well be remarked from the fine figures and carriage of cadets, at the Military Academy, should assure a taste, and practical judgment adequate to this highly important point; for it is a most important one. A chest bulging out on one side, or sinking in, from contraction of the cavity of one side, ought to be as discoverable to a recruiting officer, as a stoop from hollowness in front.

LII.

Hernia (rupture) is sufficient cause, in our service, to reject a recruit, and justly so.

Some foreign authorities, but not all, are unqualified in objecting to recruits with any form of hernia.

These forms are: 1. *Inguinal and femoral* (in the groin). 2. *Umbilical* (at the navel). 3. *Ventral* (when it occurs at any other part of the abdomen). It is sufficient, for present purposes, to name these forms.

Inguinal and femoral herniæ are causes for rejection. In examining for these disabilities, let the man raise his hands over his head, make them touch, and hold them thus; let him be directed to cough frequently while in this posture, and the hernia will be seen. The track of the inguinal canal is to be carefully examined.

Umbilical and ventral herniæ, according to Marshall, are not so objectionable. He says, "these varieties are commonly of little consequence, and rarely incapacitate a man for military duty;" and that the cases of ventral

hernia that come before the medical officer, are, in most instances, scarcely perceptible even during the act of coughing; the protrusion not being often larger than a hazel-nut. He infers, from the frequency of umbilical hernia among the natives of tropical Africa, and from the great fatigue they can endure and do undergo without injury, that this form is seldom an objection to a recruit.

Yet, it should be recollected that the tendency of hernia is to increase, and with this, to a certain extent, a liability to strangulation; that these affections are used by malingerers for their purposes. Hence, the opinion of Marshall, authoritative as it may be, should be guardedly acted on in these cases, in our service; and this the more especially, as on reinspection at a depot, an opinion different from that given at enlistment, may involve the surgeon in pecuniary responsibility. Here is a reason for a conventional understanding

throughout the service, as to what should be causes for rejection.

Observe relaxed *abdominal rings* (outlets for hernia), as they indicate a tendency to rupture.

LIII.

Enlarged abdomen may proceed from various causes, natural and morbid.

There is the *pot-belly deformity* without disease; of this the writer has seen one remarkable instance. The recruiting officer, on being sent for, rejected the man. These abdominal protuberances are often connected with unusual anterior convexity of the vertebræ; the spine, therefore, requires attention. The whole course of the spine should be carefully examined.

When the abdominal enlargement depends

on visceral disease, that is, chiefly in the liver and spleen, and is accompanied with signs of general ill health. Hepatic disease is indicated by pain, soreness and enlargement under the right ribs, by a putty-like, or yellowish skin; this hue also tinges the eye; and there is a dirty white fur on the tongue; frequently tumid ankles and feet, from serous infiltration. Dropsy is another cause of abdominal enlargement.

The spleen is enlarged by malarial influence. The case is very chronic, and may not much affect the general health. The surgeon will judge from circumstances of the force of the objection. The hepatic (liver) disease just mentioned arises most usually from intemperance, and is a clear objection to enlistment.

The following case shows how the liver may be apparently much enlarged, but not really diseased. M. P. had been under treatment for diseased and enlarged liver. This treat-

ment injured the general health, without in the least improving the state of the liver. The writer, after repeated examination, gave the opinion that the liver was much lower in position than usual; the edge turned towards, and nearly resting on the spine of the ilium. The feeling of the organ was perfectly natural, the edge sharp and smooth, of normal size, and free from pain, tumor, or irregularity; but greatly out of position. The person was advised to discontinue medicine, so far as action on the liver was concerned, as the biliary secretion was nearly natural. Five years after, the patient was greatly improved in health, while the liver remained in *statu quo*.

LIV.

Make careful inspection of the *testicles* and *spermatic chord*. The rule laid down by a

distinguished army surgeon is, "that any remarkable enlargement or induration of the testicle is cause of rejection;" and, any obvious disease thereof, might be added. The very great natural difference in the testicles of different persons should be borne in mind.

Hydrocele (dropsy around the testicle), if unconnected with disease of the organ; if the effusion of fluid in the sac be slight, and not on the increase; especially if the health be good, which is very commonly the case, is not an objection. The writer has seen a soldier with a considerable hydrocele, who never complained, and did his duty efficiently.

Hydrocele of the spermatic chord presents the same consideration to the surgeon. If small and not inconvenient, and if the general health be good, it is not an objection. But, in both this and the preceding case, exercise a sound and cautious judgment; for that

judgment may be reviewed at a depot, or at a regimental reinspection.

Cirsocele (enlarged veins of the spermatic chord) almost invariably occurs on the left side, and is often met with. If not large, and if unconnected with a varicose diathesis, that is, varicose veins in the lower extremities, the recruit may be passed. Marshall, after examining thirty thousand recruits, never saw varicose chord on the right side; and adds the important remark, that he never had occasion to admit a patient into the hospital on account of cirsocele. The writer never had an application at sick call on account of this affection.

The veins of the scrotum are often enlarged, and this is termed *varicocoele*. The same considerations arise out of this as from the preceding case. It is usually a very slight thing; and is mentioned chiefly to show the

unprofessional inspector how easily this may, by its having the feeling of earth worms, be distinguished from disease of the testicle itself.

LV.

Hemorrhoids and fistula ani, from their frequent existence in the class of men who resort to a rendezvous, should always be inquired into.

Hemorrhoids that protrude frequently and largely, or that bleed much, materially interfere with the soldier's ability to march. They are, under such circumstances, causes for rejection. *Fistula ani* is always objectionable. Wherever these disorders exist, there is good reason to inquire into the general health; particularly the state of the liver and of the lungs.

Soldiers desirous to obtain discharge, will use these infirmities as grounds to extricate themselves from service.

LVI.

OF THE SUPERIOR EXTREMITIES.

The necessity for rigid examination of the joints, and of the bones for fracture and its consequences, is strikingly exemplified in the following cases.

A man was enlisted at a rendezvous. A few days thereafter the writer was ordered to inspect recruits at that station. He was struck with the appearance of a soldier's arm, although the man had on his fatigue jacket; and, on examination, found the recruit unable to extend the forearm more than one-half, in consequence of injury done by fracture to the

left elbow-joint. The man was forthwith sent off.

The following remarkable case is given by Staff Surgeon Marshall. "The late Dr. Brown, Staff Surgeon, examined a recruit, who performed satisfactorily all the evolutions to which recruits are subjected, although he had a *disunited fracture of the radius and ulna of the right arm.*"

On reporting for duty at Madison Barracks, the writer found a deserter in the guard house, on sick report, with fractured clavicle on the left side. He was a most insubordinate, unruly fellow, had for weeks removed the bandages at pleasure, and was brought to hospital with a ball and chain on the leg; this he managed to slip off, and again deserted. He was apprehended some days after, and again confined. Bandages were reapplied, which he threw away, and used the arm at

pleasure. His unmanageable habits prevented the union of the bone. It was, however, satisfactorily shown that he possessed the perfect use and strength of the arm, that the fracture gave him no pain, and he declared the limb was as sound as ever. He left with the command, and served in Florida, as I was subsequently informed.

The above cases show what room there is for imposition. Therefore the surgeon should commence by examining the bones on which the humerus (bone of the arm) plays. These are the clavicle (collar bone), and scapula (shoulder blade). Then see how entirely free the motions of the arm are at the shoulder joint, in rotation, circumduction, adduction, and abduction. Following down the limb, ascertain the perfection of the elbow hinge joint; then the pronation, supination, and rotation of the forearm and wrist; and the

perfect flexibility of all the joints of the thumbs and fingers.

Marshall observes, that men whose clavicles have been once fractured should almost invariably be rejected. The rule, however applicable to the almost endless term of service in the British Army, does not apply to ours. Bones heal as firmly as other parts; and simulation for discharge is not the vice of this, as it is of foreign services. Yet if the bone be badly united, or callus forms a tumor, it may be that the man is not able to bear his knapsack strapped; and should be rejected.

Men offer to enlist who have had fractures so near the elbow, as somewhat to affect the symmetry of the arm. But if there is no deformity, and if the motions of the elbow joint be perfectly free, so as to give the use of the limb in reaching the cartridge, the previous fracture is not a disqualification.

Entire loss of the *thumb* or *index* finger of

either hand, stiffness or contraction of these members, are unquestionable objections. Marshall says the loss of any finger disqualifies the recruit. The writer has known two soldiers each lose a finger; the one the middle, the other the ring-finger. Shortly after, so far as expert manipulation was concerned, they were entirely unconscious of the loss. The re-enlistment of a soldier who has lost the ring, middle, or little finger, would be unquestionably proper. The writer cannot perceive, in this case, the difference of physical capacity between the soldier and the recruit. A stiff or contracted finger is a greater objection than the loss of a finger.

Very recently a recruit was brought from a station. He repented of enlistment, and soon after it, mutilated himself by chopping off a part of the index finger of the right hand. It was cut off just beyond the first joint, through the second metatarsal bone. At first sight the

writer was disposed to recommend his discharge; but on procuring a musket, he was so perfectly able to cock the gun, draw the trigger, and in every other respect to use the stump, that he was sent on to the regiment.

Contractions of the fingers, unless very slight, are disqualifying injuries. They should, however, be carefully estimated by the surgeon.

LVII.

INFERIOR EXTREMITIES.

Inspection of the inferior extremities cannot be too circumspectly conducted.

A primary consideration is the symmetry of the limbs. First, as to length. Any disparity that causes limping is a disqualification; inequality in length, that does not produce that defect, is of no consequence. Secondly, as to

size. There is a slight natural difference of size in favor of the right limb; but, unless some other cause, such as attenuated muscles, occasion disparity of size, there is no objection. Enlargement of the limb may be produced by callus after fracture, or by serous infiltration. These will be judged of, the one as to size and reunion of the fracture, the other in connection with constitutional disease. Of itself, previous fracture is not a cause of rejection.

The surgeon must be assured that all the *articulations* are free and flexible. Here attention is again called to the symmetrical relations of the spinal column and the extremities; especially that the *lumbar vertebræ* have their natural motions; that the *hip-joint* is free from disorder; that the *knee* has its great power of flexion and extension; that the *ankle* and *toes* concur to give the foot its wonted and essential freedom of motion. Marks of cupping, of setons, or of blistering,

especially about the hip and knee, should induce particular attention to the local condition, and to the general health.

LVIII.

Ulcers, if small and recent, may be passed over; but always look at the general health where there is an ulcer.

Cicatrices (scars), if the result of previous extensive ulceration, if they be red or livid, if the dermoid tissue (skin) is destroyed, and adhesion to the bone has taken place, the more especially if there are marks of intemperance or ill-health at all apparent, reject the man. On the contrary, if, with apparent good health, the integuments play loosely over the bone, the recruit may be received.

The number, size, constitutional relations of *nodes*, and their disposition to take on incited

action, will enable the surgeon to judge of their importance. Exertion often makes them painful, and changes of weather still more so; and, if "the secret of war lies in the power of marching," the legs should unquestionably be sound. By searching for venereal cicatrices in the groin, or for evidences of mercurial courses, endeavor to ascertain their origin—if they be originally uncomplicated periosteal enlargements, or their connection with rheumatism. Nodes are sometimes perfectly inirritable, and, if so, are unobjectionable. They are a favorite ground for soldiers to take, who seek discharge from service.

The loss of the *great toe* is a palpable disqualification. Attend to the number, size, and site of *corns*, and especially to the *bunion*, with the nature and effects of which the surgeon is well acquainted.

Extensive overlapping of the toes, particularly when attended with either of the above

affections, greatly impairs the ability to march. Supernumerary toes are incompatible with the free use of the feet in marching, and with them, the recruit should be rejected.

The form of the foot is important, as a decided *flat foot* is an objection.

In the flat foot the inner ankle is very prominent, and lower than the outer; there is a hollow below the outer ankle; the dorsum (back) of the foot is not well arched; the foot is broader at the ankle than near the toes; the inner side of the foot, which ought to be concave, is flat or convex; when the flat foot is on the ground, the sole projects so that the finger cannot be introduced below it. Flat-footed men walk with their knees bent, they rest on the inner side of the sole, and the usual degree of motion in the ankle is impeded. Take care not to mistake *broad*, but *arched* feet, for this *flat foot*.

LIX.

Varicose veins of the inferior extremities are objectionable, first, according to their size; and secondly, as they accompany the varicose diathesis, or enlarged veins elsewhere, as in the chord. As they are not so frequent in men of short stature as in tall men, so they are less objectionable in the former than in the latter. Moderately enlarged veins, without the general signs of intemperance, do not justify rejection; but when the disease has extended so far "as to destroy the functions of the venous valves, and to threaten ulceration," no doubt can be entertained. Let the surgeon be always on his guard, when an adult is reluctant to take off all his clothes. A man was recently inspected who was exceedingly averse to take off his pantaloons; the reason

proved to be a most remarkable varicose condition of the veins of the leg.

The writer lately inspected a man whose general appearance was altogether in his favor; but, in the *right* popliteal space, there was a very large protuberance from the popliteal vein, varicose it may probably be termed, so large that he was rejected. There was not the slightest enlargement of any other vein of either extremity.

In the same regiment a man was brought in, with the most unusual enlargement of a subcutaneous vein, most probably the right external epigastric vein; for it was in the course of the external epigastric artery. The enlargement commenced on the right side of the sternum, half way down that bone. The vein pursued a straight course down the abdomen very superficial, and entered the femoral vein under Poupart's ligament. It enlarged rapidly till it came to the groin, and

was, in its whole course from the end of the sternum, as large as the man's thumb. There was visible no gravity in the course of the blood to be overcome.

LX.

There are some physical and mental disabilities, few, it is true, in number, that, being unknown to the recruit himself, are so obscure as to escape the observation of the surgeon until some time, perhaps months, after enlistment. For some of these neither of the parties can be held responsible; they are legitimately occult, though keen inspection will make these cases very rare. The writer has seen such cases of incipient phthisis, one of subclavian aneurism, and several instances of imbecility of mind; and Marshall adds, lumbar abscess.

It is in recollecting these obscure cases; in

bearing in mind the great importance of establishing well any appearance of unsound constitution, and in tracing the connection of local lesion with this, that the surgeon displays admirable tact and comprehension. In other respects than original obscurity the following case is impressive.

While the writer was on duty at Fort Monroe, in the summer of 1837, where a large force was concentrated to embark for Florida, an Irishman, a recruit, appeared repeatedly at sick call, complaining of rheumatic pain in the right shoulder and arm. Friction with liniments and relief from duty gave him ease. In April, 1838, at the close of the campaign under General Jesup, the writer, while sick at Fort Brooke, Florida, was requested by the late surgeon Clarke, to visit a man and give an opinion of a tumor. The soldier proved to be the rheumatic patient of the preceding summer at Fort Monroe. He had been with

the army in the field, had suffered greatly with a tumor near the clavicle, and had been sent into general hospital. It was an aneurism of the right subclavian artery, and had advanced to such extremity that nothing afforded hope, for the man was dying. This was doubtless one of those originally occult instances; but, the necessity for sharp inspection is inculcated, by there being no reason to doubt that the man had the aneurismal tumor when he enlisted.

Enough has been said, under the appropriate heads, on the signs of incipient phthisis, and on the mode of detecting mental imbecility. From observation, the writer recommends careful attention to the intellectual capacity of the recruit.

LXI.

Here the routine of inspection closes; and it may, at first view, be supposed to occupy much time. Inexperienced officers should make deliberate inspection; and, while the practised eye of the more experienced officer comes more quickly to a conclusion, there is neither necessity nor propriety in being hasty, as that is *soonest* done which is best done. In a little while all become habituated to inspection; and at a glance the contour, symmetry, thoracic expansion, and the whole figure are taken in, while tact enables them to run over the succession of particular parts. Recollecting that voluntary enlistment is instigated too frequently by, to say the least of them, equivocal motives, the surgeon covers much secure ground by never losing sight of the aspect from habitual intemperance, and

from scrofulous diathesis, and by so questioning the man as to establish sound mind. Then the senses of sight and hearing demand the strictest attention. Deformities necessarily invite the surgeon's notice.

LXII.

Recruits sometimes come from places whence they may convey contagion. To prevent bad consequences, suitable precautions, such as isolation, the person carefully washed, destroying the clothing, should be promptly taken. The following regulation requires the attention of the surgeon.

“When a man joins a regiment, post, garrison, station, or depot, the surgeon will forthwith ascertain whether he has had the variolous or vaccine infection; and if he has not, will see that he is vaccinated as soon as

practicable; and, for this purpose, he will constantly keep good matter on hand; making application to the Surgeon General for a fresh supply, as often as may be necessary."—*Reg. for Med. Dep.*

LXIII.

From recruiting stations men are sent to depot, or to regimental head-quarters, where they are reinspected by the commanding officer and a surgeon. Should any be thought defective, they are sent before a board of officers, one of whom is a surgeon, when their fitness or unfitness for service is finally decided. If rejected, the pecuniary responsibility falls, as the case may be, on the recruiting officer or the surgeon. Each has his appropriate sphere of responsibility, and with proper circumspection can sustain it.

Many recruits, before they reach a depot, or regimental head-quarters, repent of their enlistment, and endeavor to escape, at final inspection, by feigning disability. Here the reinspecting surgeon is required to be vigilant, both by what is due to the service and to the man, but, above all, he owes much to the medical officer who conducted the first inspection, that no imposture is successful. As the same medical officer does not reinspect the man, remarkable differences of opinion have arisen on the validity of certain causes for rejection. To remove these, as much as may be, has been one of several motives to prepare this work.

LXIV.

The following regulations for the Recruiting Service of the Army of the United States, merit attention here:—

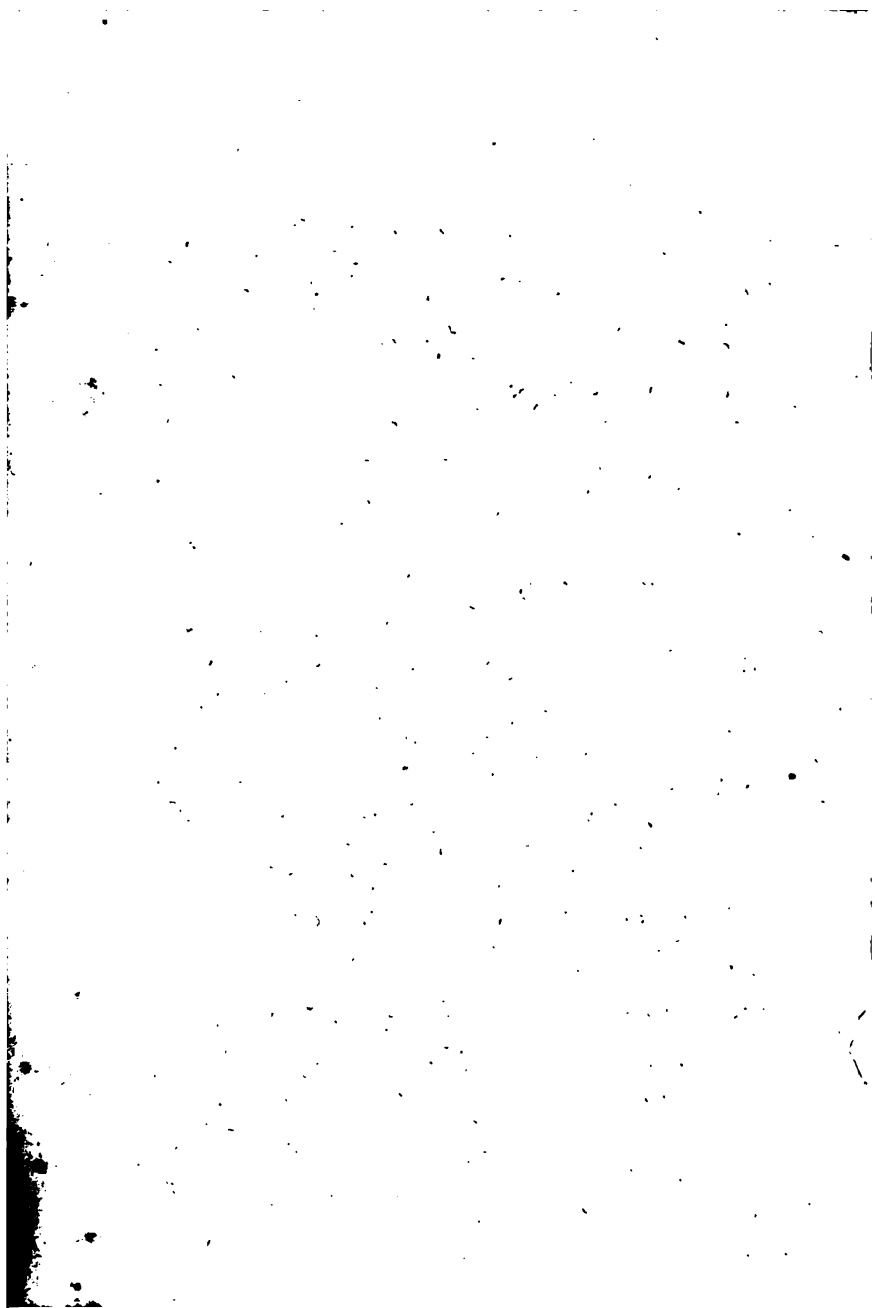
“Par. 67. Whenever a recruit is rejected, the Board will report whether, in its opinion, the disability, or other cause of rejection, existed or originated before or after the date of his enlistment; and, if the former, whether with due care and proper examination, such disability might not, in its opinion, have been discovered by the recruiting officer and examining surgeon, at the time the recruit enlisted.”

Par. 68. “When a recruit is rejected and discharged, in consequence of the non-observance of the recruiting regulations by the recruiting officer and examining surgeon, they shall be charged with the amount of the bounty and clothing, which recruit so rejected may have received from the public, to be deducted out of the pay and emoluments of such officers.”

Par. 69. “As the decision of Boards of Inspectors may often involve the recruiting offi-

cers in pecuniary liabilities, by their being required to refund to the United States the amount of any loss occasioned by the discharge of a rejected recruit, the Board will, in all cases, make the proper discriminations, and always state whether the want of due examination, at the time of enlistment, be attributable to the recruiting officer or the examining surgeon, or to both; and, as far as may be practicable, to state the amount with which either ought, in its opinion, to be chargeable."

The surgeon who is on the reinspecting Board of officers, is required to give a certificate detailing the causes that have induced him to consider a rejected man as unfit for service. This certificate is forwarded by the commanding officer of the Post, with the report, to head-quarters of the army.



ARTICLE III.

ON THE

DISCHARGE OF SOLDIERS.

Feigned Diseases.



PART I.

GENERAL CONSIDERATIONS.

LXV.

THE discharge of soldiers not unfrequently takes place, in all services, without good grounds for the surgeon's certificate. This arises from one of two circumstances—the surgeon overrates the disqualification, or the soldier feigns it. The mistake of the surgeon seldom occurs; but successful imposition is much more common.

This imposition, technically termed *malinger*, is not so common in our mild service, as in the more severely disciplined armies

abroad. Instances are, however, not unfrequent in the United States army; and the surgeon, in arranging his professional views, should not confine them to the limited sphere of a peace establishment, but on this, and on all points, regard and prepare for what takes place in war, when, in all services, duty and discipline are so conducted that bad men will, if possible, evade them. Professional pride concurs with official obligation, to induce the surgeon to master this point of duty, involving, as it does, deep pathological discrimination; and if malingering be less frequent than formerly, it is because the surgeon's *skilful* scrutiny affords less prospect of successful imposition.

LXVI.

It has been well said that malingering is itself "one of the most disqualifying features

a soldier can display." It is certainly a deep-rooted vice, based on discontent or cowardice, or, to use the mildest terms, is a great weakness of character. It must, therefore, be looked at by the surgeon in all its bearings.

If the certificate be perseveringly denied, the man may become more obstinate and worthless; and if discharge be prematurely granted, the example is bad. An actual cause of disqualification is, in most cases, obvious; but unfortunately, in the feigned case, there seldom can be the absolute certainty that warrants the compulsory performance of duty, or the infliction of any punishment. Marshall, who has written so ably on this subject, admits that, in the face and eyes of British discipline and of the experience and talent of their surgeons, the malingerer deliberately bent on his purpose, will sooner or later attain it. What adds to the difficulty is, that the best soldiers will sometimes simulate for a

discharge; and in such cases the surgeon loses all the advantage derived from a knowledge of previous character, as that, in bad men, aids in discrimination.

It is important to the service to detect an impostor, for the example has great force. At the same time it is due to humanity and to science, that, by the agency of the surgeon, the innocent shall never suffer what is due only to the guilty—as, in the following cases, is strikingly illustrated.

M. Foderé gives an instance in the French service of a youth, who complained of pain in various parts; but as his general health did not appear to suffer, he was treated as a simulator—yet the youth died of the complaint.

Doctor James Johnson, in the British service, gives the case of a soldier who said he could not move one of his shoulders. Being medically treated for a long time without

effect, and showing no symptoms of constitutional disorder, the man was tried for feigning disability and severely whipped. Yet the case terminated in abscess of the shoulder, and anchylosis of the affected joint.

What a lesson, too, is inculcated by cases in the English army, where men, being pronounced simulators of madness, were tried and flogged by sentence of court-martial; and yet, were subsequently, and most satisfactorily proved to have been maniacs at the time of punishment. Well may the inclinations of the service and of the surgeon be to mercy; let the guilty escape rather than punish the innocent.

LXVII.

WHAT THEN IS TO BE DONE?

Let the surgeon approach all cases in the most liberal spirit, without the bias either of

prejudice or partiality. It is an indispensable prerequisite to have a thorough knowledge of the soldier's previous character; and let him examine well the general health; and trace, as subsequently will be advised, real or pretended lesions. Let him call to his aid, as they may be accessible, the suggestions of other and experienced authority in similar cases: let him, in a proper way, secure the confidence of the soldier, so as to reach his secret impulses; let him direct the vigilant scrutiny of a sensible hospital steward, and learn all he can from the company officer and sergeant; along with the *probability* of simulation; let him keep in mind the *possibility* of real disease; and let him receive guardedly the assurance of the soldier that he does not wish to be discharged, as malingerers sometimes say so for effect.

All the probable motives, particularly recent ones that induce men to simulate disability,

should be carefully sought for, and duly weighed.

Is the man constitutionally indolent, so as not to cultivate the active spirit and habits of the soldier? or is he unclean and negligent, so that by these traits he incurs the constant, and, to such men, the irritating infliction of essential discipline? Has he habitually the bad character to justify a suspicion of his motives? During hospital treatment, has he been reluctant to use remedies prescribed for his cure? for really sick men are willing to do all that is advised for them. Is he anxious to go to General Hospital, so as to be removed from the sphere of medical and military observation to which he has been subjected? Is he beset by the importunity of relations, or of other designing persons? Inquire into the circumstances of his enlistment; were they such as to render it probable, that the impulse to en-

list has given place to a determination to escape from service.

By all these the surgeon is so guarded that, if mistaken, the means used to avoid error, render that error venial in the view of science, of humanity, and, by consequence, of the service.

LXVIII.

The malingerer approaches his purpose deliberately. There are persons about him to further his views, and to advise him in emergency. He no doubt often resorts to books to learn his art perfectly. He acts from strong motives, that have been, in part, already alluded to; and to these is added, in some instances, an inherent hatred of military life; which feeling, though a vice in the view of the service, may be constitutional as re-

gards the individual. From these motives he derives a perseverance so untiring as to become obstinacy itself; while the mind, thus bent on its object, acquires an adroitness baffling, in too many instances, all detective ingenuity.

It is not at all improbable that what was at first pure dissimulation, bears with such force on the mind as to become in time a morbid condition, especially if thwarted. The intensity of mental impression leading the soldier to do wrong, while the impulse cannot be considered other than morbid, and of course venial, is, without giving too much scope to moral speculation, illustrated by the following incident, related to the writer by an officer of high rank, and of punctilious accuracy.

A Swiss enlisted in a regiment of United States infantry, and for much the longer part of his term so conducted himself as to acquire not only the most unlimited confidence, but

the greatest respect of his officers. He was one of those men apparently incapable of unsoldier-like or dishonorable conduct. Occasionally he was subject to periods of gloomy temper; but never so as to disqualify him for prompt discharge of duty. These paroxysms of gloom are well marked in nostalgia; though in real cases the cause may not be made known. When more than two-thirds of his time had expired he disappeared from the post, and, to the surprise and regret of the command, was reported as a deserter. About a year after this, the commanding officer saw a man come into garrison, whom he recognized as the Swiss. The Sergeant reported his voluntary return to duty. On inquiring into the case, the man stated that under an impulse he could not control, he had determined to return to his native country. He did so, remaining some time amongst his friends. Conviction of the dishonorable course he had

adopted led him to return to America. He went to the post whence he had deserted; and delivered himself up, under full expectation of suffering punishment for desertion. The commanding officer, after being perfectly satisfied of the truth of the soldier's statement, judiciously decided that he acted under the influence of the disease *nostalgia* (home sickness), and restored him to duty, in the discharge of which he fully sustained the irreproachable character he had before borne as a good soldier.

The discriminating surgeon will give to these rare instances, the philosophic and humane judgment they undoubtedly demand; carefully distinguishing them from cases that do not obviously involve such moral considerations.

LXIX.

The surgeon meets this malingerer in a temper of mind that alike becomes his profession, the admitted difficulties in the case, and that is calculated to defeat what of sinister design proof may disclose. Unless the case is obvious, he should from the outset conceal all feeling of distrust, and be patient to a degree; so as by calmness and vigilance under opportunity, to obviate suspicion on the part of the soldier. By this, he leads the patient to overact his part, and by making contradictory statements, to reach detection. This overacting disposition is a conspicuous feature in many malingerers.

Harshness induces the young soldier to make further efforts, while it makes the veteran simulator more wily and persevering; seeing that harshness in the surgeon indicates

impatience, which may finally yield to impotency. This severity, too, may be totally misapplied, in being directed against a case ultimately ascertained not to be feigned.

A further claim to the patient imperturbability of the surgeon, grows from the fact that moral means are, in a great number of cases, those to be relied on to detect the malingerer. The young soldier is not so calculating, and may yield; but the *old soldier* artfully turns every circumstance to his own advantage, and to the surgeon's perplexity. He acutely estimates the surgeon's dispositions, and particularly whether he has been easily led to grant certificates. He knows how much it is to his purpose to have a commanding officer desirous to get rid of him, and who may urge the surgeon to give a certificate of disability, in order to dispose of a dangerous, scheming malingeringer. The surgeon should be well aware of this collateral influence; and while always

ready to avail himself of any suggestions from a source so imposing, he should ever promptly recognize importunities to get rid of a bad man, come whence they may.

LXX.

The surgeon has usually all the means necessary to clear up his doubts. The first sergeant of the company, or other soldiers, may communicate satisfactory information. He can place the man in hospital, and, if necessary, in a ward alone. The importance of confidential, intelligent hospital attendants is conspicuous here, for nothing contributes more to detect imposture than a vigilant hospital steward. The soldier should be long enough in hospital to give the surgeon ample opportunity for deliberate observation, but no longer, for obvious reasons. And while in

hospital medicines of offensive flavor and nauseating, or remedies in the form of external application painful and vexatious, should be prudently and perseveringly administered. The surgeon who is aware that giving long courses of medicines encourages malingering, and who gives nothing but what would be safe in real cases, will wisely manage the man in hospital. Certain cases justify the *proposal* of severe means in the hearing of the patient, but nothing, short of the most unquestionable ground, can sanction their use. Boërhaave stopped the progress of a simulated or sympathetic epilepsy that appeared in the hospital, by threatening to burn the arm with hot iron in the first case that thereafter occurred. What is called in the British service the *mistura diabolica*, made of tobacco, assafoetida and Glauber salts, is so offensive to the taste and stomach that, given perseveringly and judiciously in very small doses, the man may give

in rather than be continually annoyed by taking it. These and other harmless means to act on the fears, feelings, and obstinacy of men, can be safely, properly, and adroitly used by the surgeon.

In the sequel it will be seen, that some desperate malingerers were detected when in a state of intoxication. They got drunk, their disability was forgotten by them, and thus they were exposed. How far is an officer morally excusable in resorting to this means of detection? The writer will not presume to decide for others in this matter. It is a fit subject for reflection, and for the decision of each surgeon's casuistry.

LXXI.

It may be a principal object with the simulator to be sent from regimental to general

hospital, because there he has a new sphere and diversified aids for imposition. While, therefore, the surgeon exercises sound discretion in keeping the man in hospital, he should never, while there is a shadow of doubt, send him to general hospital. He who has longest had charge of the patient, is the best judge of the propriety of giving him a certificate for discharge. Sometimes, by sending a soldier into general hospital, he may be placed under the care of a more experienced officer; or, in doubtful cases, if change to a healthier air is gained by sending him in, it should be done. Always remember that recruits and young soldiers should be as little as possible in hospital.

The soldier sometimes desires to be discharged in the advanced stage of incurable disease. As he is not at such a time the judge of what is best for him, the surgeon should not discharge him, unless the sick

man is near his friends, and they, with competent means, be willing to take care of him. The soldier thus situated is entitled to all the comforts of a military hospital.

PART II.

ON

DISQUALIFYING DISEASES,

AND THE MEANS OF

DETECTING FEIGNED DISEASES.

LXXII.

THE most conspicuous causes that permanently disqualify soldiers for military duty will now be briefly, but it is hoped, perspicuously considered. It readily occurs to the surgeon, that many causes which justify rejection of a *recruit*, demand the discharge of the soldier; and that proper reference to what has been said in a former part of this work, will save tedious repetition under this head.

When a soldier applies for a certificate of disability, the surgeon looks first for *general* signs of physical disqualification; and *special* observation is invited by the nature of his local complaints. If what has been said on the marks of ill health in former paragraphs is recollected, much ground is covered in the outset of the inspection by this constitutional view. When disease exists in organs of assimilation, emaciation follows necessarily on the loss of supply to the system. If rheumatic or neuralgic irritation is of long standing, medical physiognomy exhibits, in addition to other evidences, a peculiar anxiety in the countenance, as if the muscles, expressive of painful suffering, had become fixed in that expression. When youth or early manhood shows emaciation, though without local signs, destructive constitutional process is at work. By these general considerations the surgeon is readily introduced to those of local lesion

to be presently detailed; and the first and important inquiry is answered, viz: Does the soldier exhibit general signs of the long standing disease of which he complains, or of any disqualifying constitutional disability?

LXXIII.

The surgeon is often called on to decide on disqualification from, and simulation of *ophthalmia*.

The pertinacity with which inflammation of the eye resists treatment; its proneness to frequent aggravation, from the habits of the soldier being so unfavorable to a cure, and particularly if it is connected with scrofulous habit, these preclude the probability of the soldier ever being fit for service. Men of temperate and regular habits are less subject to ophthalmia, and recover from it more readily.

If the functions of the conjunctiva, cornea, or iris are materially injured, partial or total loss of vision leave no doubt of the course the surgeon should pursue. But the loss of one eye in service does not justify the soldier's discharge, though it positively rejects a recruit.

But ophthalmia is simulated; and the extent to which it has been artificially excited, in order to procure discharge for pension in foreign countries, is scarcely credible. The means used to excite inflammation are usually lime, corrosive sublimate, tobacco, &c., and extracting the eye lashes to apply caustic to the edge of the lids. A British officer observed ophthalmia to become suddenly very prevalent, and, suspecting something wrong, he went unexpectedly into the hospital wards at night, made the men march naked into another ward, and, on examining their clothes and bunks, corrosive sublimate was found. In

two regiments three hundred men were suddenly attacked with ophthalmia, which was thus traced to its artificial cause.

Sir John Ballingall says: "From a knowledge of these mal-practices, it has been seriously questioned how far the British epidemic was spread by contagion, or had anything to do with Egyptian ophthalmia. Why was the disease so exclusively confined to regiments or garrisons? Why were women nearly if not wholly exempt from it? Why did the disease become more prevalent and severe after the passing of Mr. Windham's act, by which every man, who was discharged as disabled, was entitled to a pension? and why were the soldiers of the French army not affected, after their return home, with what we call Egyptian ophthalmia?"

If ophthalmia appear suddenly, and extend rapidly, about the time unwelcome orders are expected or received; if there be not reason-

able causes for this irruption of the disease; and if the right eye be principally or generally affected, the surgeon may properly suspect artificial causes.

Soldiers destroy each others' eyes in order to obtain pensions. Now, what has been done in foreign services in numerous cases, may be practised in our service in individual instances, for there is a very great proportion of foreigners in the United States Army.

Temporary *opacity of the cornea* is produced artificially by pencilling that membrane with nitrate of silver. The various forms of opacity, mentioned under the head of examination of recruits, are all either so obstinate or so incurable as to require discharge. The *nebula* should be carefully treated, as it is often entirely removed; and is perhaps the only opacity that is removed without operation.

Cataract, though removable by operation, does not offer much prospect for recovering

perfect vision. On one occasion, however, a number of men in an English regiment induced *capsular opacity*, by puncture with a needle. The surgeon operated, removed the opacities, and restored every man to his duty.

Amaurosis is simulated by dilating the pupil with belladonna mixed with snuff. The disease does not arise suddenly in general. When local applications are used to dilate the pupil, two circumstances should be recollected: first, that these applications in many cases induce redness of the conjunctiva not natural to amaurosis; and secondly, their effects are transitory.

In all cases of blindness, and especially when you suspect simulation, watch the man when he is off his guard, to see if he does not get out of the way of obstacles. A young Frenchman reported himself blind. The truth of his statement was tested in every way—and the doubt was sustained by the contraction of

the pupil under light. He was taken to a river bank, and being told to go forward he fell into the river. Persons had been placed there to keep him from drowning. He was discharged. Afterwards, being warned of punishment if detected in feigning blindness, and being solemnly promised relief from all responsibility if he would acknowledge the truth, he took up a book and read it.

Nyctalopia (*night blindness*) is often feigned. This has been done in the British army in Egypt, where much inconvenience resulted from the actual or feigned disease. The difficulty was removed by putting double sentinels on post, a man who could see with one who could not. By the use of convex glasses, and holding a book very near the eye you will detect the myopic (*near sighted*) case.

LXXIV.

Deafness is valid cause for discharge; but as it is easily simulated, it is perseveringly feigned. Ingenuity will sooner or later detect it.

Observe that the really deaf man has a peculiar expression of countenance.

Examine the passages to the ear for abscesses, for discharges from carious bone; also in order to ascertain the healthy state of the tympanum, and that no extraneous substances have been introduced, and that the external passage is not obstructed with wax. Inquire if the man has been exposed to any of those causes that are apt to produce deafness, such as concussion of the brain, much loud firing in field exercise, long-continued fever, or local inflammation from exposure to cold. Observe too if there be the alteration of the voice so remarkable in some forms of deafness. It

should be borne in mind that real deafness is, from most causes, slower in coming on than in feigned cases.

How important ingenuity in devising methods of detection is, may be inferred from the instance of the soldier who, feigning deafness, was put on spoon diet and kept on it for some time in hospital. The surgeon one morning reproved the attendants in a very low tone of voice for starving the man, and ordered beef steak and a pint of porter. The simulator betrayed the imposition by an involuntary exclamation of thanks for the change.

Feigned deafness is sometimes detected by making a loud noise unexpectedly near the man.

LXXV.

Pulmonary Consumption. The surgeon can scarcely be at a loss to decide when this dis-

ease is so confirmed as to require the discharge of a soldier. The constitutional symptoms, such as the scrofulous habit develops, and the local signs, are unequivocal; particularly if physical signs are established by the stethoscope. The thoracic conformation, pulse, expectoration, emaciation, and the effect of exertion on respiration, are familiar. The efforts at simulation by mixing foreign pus with sputa are too coarse to be successful.

It is not usual to discharge consumptive patients unless at their own request. If the disease comes on subsequent to enlistment, or if the patient is in the confirmed stage, if they desire to remain in hospital, they should be allowed its comforts in their last days.

Hæmoptysis can scarcely be successfully feigned before a surgeon who is professionally on the *qui vive*. The difference between bullock's blood mixed with saliva, and that coughed up from the lungs in genuine cases,

is readily discovered. A malingerer to feign phthisis will take another man's expectoration; and to simulate hæmoptysis, borrows blood from his neighbor's basin; but when all circumstances are considerably weighed, the constitutional symptoms, the character of the man, &c., the feigned cases must be easily detected. If he is suspected of wounding the gums, or in any other way rendering the saliva bloody, making him spit without coughing, or by examining the mouth the truth will be ascertained.

Where the *Heart* is really diseased, the stethoscope and the general symptoms render it scarcely possible to deceive a surgeon familiar with the signs of hypertrophia, enlargement of the cavities, &c. The heart's action is excited by garlic in the rectum; also by using veratrum album, which has been extensively used in the British service. Where

these causes are suspected, seclude the man so as to prevent his procuring them.

Some persons have in health an intermitting pulse—the state of that health is to be considered. In France fine ligatures have been tied around the neck in order to produce signs of aneurism of the heart; they occasioned fulness of the face, and irregular action of the heart. If the pulse be feeble at the wrist, suspect some artificial pressure, and examine the temporal and other arteries.

LXXVI.

In the colonial service of Britain, *visceral disease*, especially of the liver and bowels, is so frequent from causes derived from climate, that soldiers often attempt to feign them. But this must be very clumsily and, of course, unsuccessfully done; for what medical officer

could fail to ascertain, from constitutional and other signs, such malingering.

Some men have the power of producing *vomiting* at pleasure, and thus feign disease of the *stomach*, with success. In this case the men neither lose their appetites, nor will they so constantly throw off their food as to cause emaciation, and other characteristic signs of chronic disorder of the *stomach*. In such persons the general health is so little altered as to justify suspicion of simulation. Periodical vomiting is produced at pleasure by pressure on the region of the *stomach*. Vomiting up frequently of undigested food, should excite suspicion, and induce the patient to be closely watched.

Hæmatemesis is feigned by swallowing blood and ejecting it by vomiting. If the surgeon recollects how invariably this hemorrhage is symptomatic of visceral disease; and that this visceral disease is chronic, with obvious con-

stitutional signs—that without this previous disorder men do not vomit blood—he will, if a man in good health complains of vomiting blood, especially if the soldier's character be equivocal, fairly suspect simulation; will have him closely watched, and, if necessary, confined—so as to prevent his procuring the means of continuing the imposition.

Foreign military surgeons say that soldiers can occasion a *tympanitic state of the abdomen*, and by means that have not yet been discovered. It is most probably accomplished by swallowing air. One case, not a soldier, has been detected in this way. When a number of such cases occur suddenly and simultaneously, it is suspicious. Making men take the *mistura diabolica* will be a safe way to induce them to give in.

It is scarcely probable that an experienced and careful observer will fail to detect simulated cases of acute or chronic hepatitis:—

and all agree that though the skin may be dyed yellow by external washes, and the stools and urine be colored yellow or dark red, by internal means, such as rhubarb, &c., yet there are no means by which the adnata can be tinged with yellow, so as to feign *jaundice*. This has also concomitant signs sufficiently conspicuous.

Diarrhœa and Dysentery, when chronic, never fail to induce an emaciation necessarily attendant on continued disease of the liver and intestines. Other symptoms become conspicuous, and when all are considered, there is no prospect of successful deception, even though the soldier should borrow his friend's evacuations. Place the man where he has access only to one closetool, and confine him to its use by taking away his clothing, to prevent his leaving the ward.

The simulation of acute diseases is much more easily detected than chronic, when the

former are seated in organs of supply, such as the stomach, liver, bowels, &c. The group of active febrile phenomena lead at once to the existence of acute disease, and generally to its *locale*. In the chronic, nutrition is cut off, and signs common to disease of organs of supply, such as debility, irritability of the pulse, pale or sallow complexion, dropsical effusion, emaciation, with local signs peculiar to the disorder of each viscus. It is disease of these organs of supply that are most usually feigned. When, however, the various forms mentioned under this head actually exist, and appear to be incurable by medicine or by change of climate, discharge should be granted. A good soldier should always be allowed the trial of a change of climate.

LXXVII.

There appear to be two principles on the subject of *Hernia*, well laid down. First, a recruit with hernia should never be passed; secondly, a soldier with hernia should not be sent into the field. Should a soldier bring on hernia after enlistment, it becomes a question whether he should be discharged. All reasonable efforts should be made to remove the hernia by radical means—and certainly to prevent an increase by judicious use of the truss. The circumstances of the service will, in this country, decide the question of discharge. As long as he is able to do his duty, and many men with inguinal hernia do this perfectly well in time of peace, there is no reason to urge his discharge. The observations on umbilical and ventral hernia will be recollected in this connection.

LXXVIII.

However small the *testicles* are, if not diseased, the man should neither be rejected as a recruit, nor discharged from service on that account. But enlargement of one or both testicles is always to be particularly attended to, so that if it be from morbid cause the man may be discharged. A natural difference in the size of the two organs is sometimes quite conspicuous, but may be readily distinguished from morbid enlargement. All these considerations apply likewise to the epididymis.

Retraction of one or both testicles to the ring, or their being confined to the inguinal canal, should not be mistaken for hernia. Some men have the power of retracting and dropping the testicles at pleasure. These cases do not involve the discharge of the soldier.

Hydrocele is often so slight as not to interfere with the duties of the soldier; and the case is quite obvious when it does.

Soldiers have attempted to impose a scrotum designedly inflated with air, as a diseased scrotum and testicle. The sudden accession and a gaseous, puffy feeling distinguish it from enlarged testicle, or from the worm-like feeling of *varicocele*. The general health and appearance are affected in many instances of diseased testicle. If the man is so confined as not to allow him to reinflate the part, the cause and nature of the case are soon made evident.

Many of these forms of malingering are the desperate efforts of desperate men to escape from the almost perpetual bondage of foreign enlistments. They may not have occurred to many of our medical officers; but the following case will show the surgeon, that deep dissimulation is not confined to armies abroad.

A man was inspected by an acting assistant surgeon at a northern station. He was in all respects sound, and remained so for two months at the same post. He was sent off to the regiment or to depot, and, becoming dissatisfied, he determined to leave the service. On his route to the depot he tied a ligature around the scrotum, and kept it there long enough to occasion a general swelling and enlargement. Just previous to arriving at the depot, and in time to conceal the mark of the ligature, he removed it, and on reinspection was rejected for enlarged diseased testicle. In a short time afterwards he again enlisted, was recognized, and acknowledged the imposition. This case shows impressively not only what the *reinspecting* surgeon owes to himself; but also what close attention is due in order to do justice to the first inspecting surgeon.

LXXIX.

Incontinence of urine is a favorite mode of simulation. Inquire if it is caused by any injury. In old cases the general health invariably is weakened, and shows a cachectic state. There is an exceedingly unpleasant ammoniacal odor. The actual disease is rare compared with the frequency of simulation. A recent case should never be discharged.

There are various modes of detecting simulation. Have the man suddenly called in, and use the catheter; if urine be there in any quantity, of course there is no incontinence. Give a full dose of opium, and, after a long sleep, use the catheter before he can empty his bladder. Tie a ligature around the penis, and have the patient watched so that he can not untie it; and urine will collect, and in real cases the penis becomes so enlarged as to

require removal of the ligature. A case recently occurred in which the simulation was perfectly apparent; and, finding that he could not procure discharge, the soldier deserted. He was retaken—was tried and punished with twenty-five lashes. He was returned to duty. The clue to positive proof in this case was his being seen to spit blood from the mouth into the chamber pot, in order to show bloody urine.

Bloody urine has been simulated by injecting blood into the bladder; and by using the prickly pear. This bloody urine, when found to any extent, proceeds from local causes which may be ascertained; or is connected with kidney disease that impairs general health.

Calculus is an exceedingly rare case among soldiers. Sir John Ballingall saw only two cases in thirty years. Among the hundreds of thousands reported sick during the penin-

sular war, not one case of calculus occurred. When simulated, men scrape the walls and throw the lime into the urinal; when false gravel is exhibited, it is not laminated as the real production is.

LXXX.

Ulcers are not frequently causes for discharge in our service; for, if not in existence at the time of enlistment, they seldom become so inveterate as to amount to disqualification. They are more troublesome at southern stations than elsewhere.

Ulcers are excited artificially by malingerers, and some are extremely difficult to detect. They rub sand on the tibia, or on old cicatrices; they perpetuate ulceration by sprinkling cantharides on a sore, or nitric acid, quick-lime, &c. They ought not to succeed

often by such means, for the surgeon is supposed to be acquainted with the aspect of ulceration from diseased action; and in these artificial cases there is no callous edge, the surface is superficial, and the ulcer readily healed by keeping the man away from the means to prolong his deception. There is no constitutional irritation or affection in these feigned cases.

LXXXI.

Œdematous limbs are artificially occasioned by ligatures kept round the thigh for the purpose. The writer recollects one case where he could not account for the œdema, as he was not then aware of this mode of imposition. The soldier was not discharged; but, from his general health, and from the immediate relief given in hospital by rest and posture of

the limb, there was reason to suspect the use of such means. A short time after this paragraph was written, a brother of this man enlisted, and was readily persuaded by his friends to feign insanity in order to be discharged. That induces the belief that the swelled leg was for similar purpose, as the man on being put to duty without further notice of his complaint, ceased to apply for relief.

LXXXII.

Pain in various parts of the body, and of different kinds, particularly *Rheumatism*, is frequently simulated. According to the part where the pain is said to be seated, there should be obvious attendant signs, as in the head, chest, or abdomen.

Soldiers are confessedly liable to *rheuma-*

tism from their exposures; and they make use of this admitted liability to plead this pain for discharge. Acute rheumatism can never be so simulated as to deceive a surgeon, because the attendant symptoms are so active. Attempts to feign the chronic forms ought most generally to be detected. The writer has never seen a case of chronic rheumatism, that justified discharge, without evident general and local signs. The character of the soldier, his age, the severity of service he has done, are first to be considered. Then local appearances, such as enlargement of the joints; periosteal nodes; attenuated limbs from disease in the fibrous tissues, and from disease of the limbs; stiffness of the joints. Some or all of these will be found, with a febricula from irritation at night in old cases—for these are the legitimate effects of long standing rheumatism. An impostor complains at all times, but the real rheumatic is principally

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60 influenced by cloudy or damp weather. By coming unexpectedly on a malingerer, you may find him using limbs freely, which, but a moment before he said were painful and powerless. Perfectly conclusive evidence should alone discharge a young man for rheumatism.

Dr. Davis, suspecting a rheumatic patient, went to the man's window at night and tapped suddenly at it; when the man, who could not move his limbs in bed in the day, sprang up actively and went to the window.

Soldiers suspected of feigning rheumatism have been made to take a brisk purgative, and, being watched, were seen to jump out of bed and run to a close-stool, when just before they could not move.

The constant irritation of the fibrous tissues with rheumatic pain will influence the general health, and alter the expression of the countenance to that of habitual suffering. Neuralgic pains produce similar changes.

Still cases of deep-seated and long-continued pain have occurred, without apparently deranging the health. Some impressive instances of this kind have been given in a former part of this work.

LXXXIII.

Epilepsy is often simulated. The feigned differs from the real in many particulars that if well attended to will lead to detection.

1. In the simulated the convulsions are partial and successive, being voluntarily excited; not simultaneously general as in the real disease:

2. These voluntary efforts made by the simulator are so violent as to produce *perspiration*, which is not the case in epilepsy:

3. The hands when opened by an attendant

are closed again by the simulator—not so in epilepsy:

4. The nails are not livid in the feigned, as they are in the real disease:

5. In the feigned the pupil contracts in the light; not so in epilepsy:

6. The eye in the simulator may be seen to watch the impression made on the by-standers by his imposition:

7. In the feigned case the face is not distorted by convulsions, nor is it in the power of the man to simulate the spasm of the true disease, in the face:

8. The simulator does not bite his tongue:

9. There is not in the feigned case that abolition of sense that occurs in epilepsy:

10. The stage of convulsion may be tolerably well feigned, but that of subsidence cannot be imitated; for it is singularly marked by sleep and gradual recovery in the real case,

while the malingerer abruptly brings his fit to a close without sleep :

11. In the impostor snuff will induce sneezing, and salt stuffed into the mouth is at once ejected by spitting ; which show that sensibility is not suspended, as it is in the genuine epilepsy. If sensibility is manifested under the sudden application of active irritants during the paroxysm, the disease is feigned :

12. The impostor selects his opportunity to have the fit for effect ; as in the case of the soldier who, very kindly, had his fit an hour sooner than usual, in order to oblige a surgeon, who adroitly said he could wait no longer. Dr. Hennen says, "the real epileptic conceals his disease, while the simulator obtrudes his case."

If an epileptic says he has long labored under fits of the disease, it may aid the surgeon to know "that long-continued or frequent repetition of the attacks occasion a

peculiar physiognomy, which is at once recognized by an experienced eye. The features become enlarged and coarse; inferior eyelids swollen; lips thick; eyes full or vacillating; pupils dilated; cheeks pale; certain muscles of the face twitching; the countenance assumes an expression of vacancy. Epileptics have a peculiar gait; the arms and legs waste; the body sometimes fat, not often emaciated. The intelligence generally becomes weakened."

Now, all these circumstances being brought to bear on diagnosis, the prospect of successful imposture is remote.

A man feigned epilepsy. The surgeon gave him a large dose of croton oil. In a few minutes he started on his feet and ran to the water-closet. The oil was dropped between the teeth during the fit.

The writer has seen two cases that throw some light on the question of the abolition of sense in epilepsy.

An intemperate man had an epileptic paroxysm in the street; the attack was complete. He was closely questioned, and gave the most satisfactory evidence that, during the depth of the convulsion, he knew what was passing. The writer knew the man well. He was not a soldier, nor was there the least motive for deception in the case.

A perfectly respectable young man, and temperate, was seized with occasional convulsions which were, after repeated attacks, pronounced epileptic. The writer was called in consultation, and carefully observed these fits. In one of them he had traced the patient's sensibility, as far as possible, into the convulsion by various methods, and was much surprised to hear him say, that sensibility continued long after those around him supposed it had ceased. The young man, after emerging from the fit, repeated what was said by the by-standers at a time when there was,

- to all appearance, completely obtunded sensibility. The patient died some time after, and on dissection, pus was found near the base of the brain.

LXXXIV.

Paralysis, like rheumatism and epilepsy, is often simulated—and the general health of the soldier should first be carefully ascertained.

Paralysis is not very common among soldiers, and, when it does occur, is usually the consequence of an apoplectic fit induced by intemperance. The treatment is a work of time; and therefore, where suspicion exists, admits of various external applications which may induce the man to give in. Malingerers are, however, remarkably firm in enduring suffering from remedial measures, when they

are determined to escape from service. Refer to all general considerations in estimating the probability of simulation, and exercise constant vigilance to detect it. Confidential persons should watch the man's movements, at times when he supposes himself quite unobserved. Tickling a limb when the soldier is asleep will make him move it, which shows it to be an imposture. The important fact should be borne in mind, "that a mistake is frequently made by simulators of paralysis; they are not commonly aware that paralytic limbs are very pliant, and malingerers offer some resistance in the limb when any attempt is made to bend it. A healthy arm trembles when a heavy weight is attached to it; a circumstance that does not take place in a paralytic member."

Many instances of obstinate simulation are recorded; some, curious ones. They show what adroitness can on the one hand conceal,

and on the other hand detect. Many instances have been discovered by sudden violent impressions made on the fears of the patient. Marshall records an instance of a man, who obstinately feigned paralysis of the eyelid; he was discovered by his using the lid voluntarily in resisting its being raised. It need only be said, that paralysis is a positive disqualification.

LXXXV.

Insanity, be the form what it may, is an utter disqualification. It is easily feigned, as Shakspeare shows us, and is frequently simulated by soldiers, as every experienced surgeon knows. How frequently it occurs and is simulated may be, in some degree, inferred from the fact that the writer has seen six cases in

eighteen months for discharge, besides three feigned cases.

Of all cases, insanity is the most interesting that comes to the surgeon for decision. The horrible truth that, in the British service, *real* maniacs have received merciless lashings under sentence of courts-martial, and the belief that *simulated* mania may be detected by patient and well-directed observation, demand the surgeon's most serious consideration. Then while he practises deliberate discrimination to detect the simulator, the error in our service will assuredly be on the side of security from mistake; for every feeling of the service, as well as in the community, revolts from punishment, where evidence of guilt, amounting to demonstration, is not obvious.

In considering these cases, it may be well for the surgeon to bear in mind the ordinary forms of insanity. Esquirol's arrangement,

as it embraces those forms that soldiers either actually have, or are wont to simulate, and as it can be so briefly given, and as no authority is more universally recognized, is best for the present purpose.

1. *Lypemania*, or predominant melancholy, with delusion as to one or more objects. It occurs principally at middle age.

2. *Monomania*, delusion on a single subject, or on a few, with predominance of lively sentiments; and is said to occur usually before middle age.

3. *Mania*, delusions of all sorts, with excitement, occurring mostly at middle age.

4. *Dementia*, where the reasoning faculty goes wrong, because the organs have lost their requisite energy and force, as in old age.

5. *Imbecilitas*, in which the reasoning faculties have never been capable of reasoning rightly; and this commences in infancy.

All the cases the writer has met with in

the service can readily be arranged under one of these heads.

How are feigned cases to be distinguished? A few hints will be thrown out in answer to this.

First of all, ascertain the habitual character of the soldier—if he is dissatisfied with the service, and particularly if he is intemperate. In the investigation, procure all collateral aid from those who have longest known him; while your doubts as to the reality of the disease are carefully concealed. Is there any hereditary predisposition to insanity? Examine the cranium for depression of bones of the skull; attend particularly to the expression of countenance, to the eye; and if the man has ever had convulsive attacks.

Again—no form of insanity is sudden in its accession. The premonitory signs are “long-continued abstinence, incessant watchfulness, or want of sleep, an immoderate muscular

power, and non-obedience to the usual effects of medicine." Now, in feigned cases the attack is usually sudden.

Some forms of insanity, mania and idiocy, for example, have no intermissions. Uninterrupted simulation cannot be well sustained.

The man, while under examination and trial, should be kept secluded, and all exciting causes carefully investigated. The cases that came under the writer's notice, were not caused by intemperance.

It should be remembered that abnormal states of the pulse, skin, and some other functions are not essentially connected with all cases of insanity. And this may be remarked of some other diseases. So that, when present, while these general indications cannot be overlooked, their absence does not necessarily preclude the existence of disqualifying disease. The discriminating officer will not fail to apply this practical fact.

It is not possible in the scope of this work to consider, *in extenso*, the distinctive features of real and simulated madness; perhaps it could not be done very satisfactorily; as the point of what constitutes insanity is much controverted, even by jurists. Each case has its peculiarities and must rest on them, and on the sound judgment and ready tact of the surgeon. Let neither hasty nor harsh decision be made. Whatever are the other difficulties in the case, there is no necessity for haste in deciding. And, if these and other cases require the surgeon to be prepared at all points, there is in the character of the medical staff every guarantee that, what the maniac, the service, and what the impostor require, will be awarded to them by science and humanity.

As already observed, the writer has frequently seen various forms of insanity among soldiers, and hopes he has not been duped in

recommending discharge in these instances. It should be repeated that too many are admitted into service who are, mentally, totally unfit for it. As to the cases discharged on the writer's certificate, it is only matter of surprise that they were ever enlisted.

In 1839, two *imbeciles* were discharged; and two other men desirous to leave the service, were reported by the hospital steward as laboring under imbecility of mind. These men, after due deliberation, were told that if they again reported themselves at sick call for that cause, the commanding officer would be requested to have them tied up in the coldest weather to a post, from morning till night, every day, until their mental disease was removed. They knew their officer well, and, being impostors, nothing more was heard of them.

LXXXVI.

Under what circumstances do cases of *fracture* justify discharge?

Experience shows that men recover from lesions of the osseous, as readily as from those of other tissues; united bones becoming as firm as ever in the generality of cases. If after proper trial of the various means to induce bony union, that refuses to form; if, in union of a fracture in the diaphysis of bones, there should be such superabundant callus as to create deformity, or affect the motions of the limb; if there is after fracture such shortening of the limb as to occasion limping; if permanent injury to a joint results from proximate fracture;—under these circumstances the disability or deformity, as the case may be, is disqualifying.

The game, however, is in the hands of the

malingerer; for a soldier bent on discharge sees the advantage he has to plead, in the consequences of fracture, and if determined not to walk, he cannot easily be compelled to do so. The surgeon's patience and ingenuity to detect imposture are here closely tested. He will be governed by his views of the probable causes of pain in these cases; as well as by the apparent smoothness and firmness of union, required in such injuries; and also look to the general health for incidental affections that may have sprung up in the course of the treatment of the fracture.

LXXXVII.

Contractions of the joints with permanent flexions of the limbs, are often simulated. When a soldier complains of this, examine the general health, and inquire how far rheu-

matism or other causes may have produced them. Inspect the parts for any external or local causes; and look to the man's character and feelings toward his duty. Such cases never form suddenly, and the gradual operation of causes, in their progress, will have come under the surgeon's notice. Simulators have been detected by their muscles becoming relaxed and the joints movable, in a state of intoxication.*

A man complained of the right arm being immovable. He was seen passing with a bottle of arrack under the left arm. An attempt was made to snatch the liquor, when anxiety to hold on to it gave instant mobility to the hitherto useless member—for he was an impostor.

A man with a crooked back, perseveringly

* The administration of anæsthetic agents will serve to detect this class of cases.—ED.

declaring that he could not straighten it, was placed in a cask of warm water, which was gradually filled, ostensibly giving him the option to straighten his back or to drown. The latter being the more unpleasant of the two, he placed himself erect in the cask—and was returned to duty as an impostor. Besides these cases, Marshall gives a ludicrous one of a soldier who stooped so from contraction of the limbs, that the lower extremities were bent at right angles with the body. When placed on his back he maintained the assumed position for an indefinite time; but on the position being reversed he could not remain long on his face, hands and feet, and soon came flat down on his belly. He was returned to duty. In such cases, would it not be justifiable to try the effect of a full dose of intoxicating drink?

Baron Percy was wont to detect simulated lumbago by holding the man engaged in con-

versation, while some person steps up behind him and sticks a needle in his back; involuntarily the soldier straightens his hitherto immovable contraction. Men who are supposed to feign contraction of the limbs, should be made to stand on the sound limb and hold up the other. The affected leg soon begins to tremble and elongate, and finally the contraction gives way.

When *wry-neck* is feigned, the sterno-mastoid muscle opposite the contracted one is stiffened by the effort at simulation; in real cases it is not so.

Sense of danger will overcome cases otherwise hopelessly obstinate, and, when used with firmness, has sometimes worked wonders. As in the instance related by Hennen of the man, who, rather than drown when he was thrown overboard from a boat to detect simulation, swam to the boat, using an arm vigorously that he declared to be powerless; and

on account of which disability he was about to be discharged.

The application of the tourniquet has relaxed muscles, and thereby proved the cases to be simulated.

Lameness is successfully practised by malingerers. If a bad man becomes suddenly lame without any obvious constitutional or local cause, without apparent affection of the muscles or shortening of the limb, he may be fairly suspected. The length of the limb can be readily ascertained by measuring in the horizontal posture. Lameness is so easily feigned, that an obstinate simulator will succeed in procuring discharge. Slight extension of the muscles of the limb can be produced by wearing a bandage, which is often done so secretly as to escape detection.

LXXXVIII.

Mutilations are common in all services. The more severe the discipline and duties, the more frequent and effectual are the mutilations.

These injuries are chiefly confined to the eyes, hands, feet and teeth. The index finger, or one or more toes are cut off; and the incisors that are necessary to bite the cartridge, &c. are knocked out. "At least two-thirds of the male population of Egypt have deprived themselves of the right eye, or of the forefinger of the right hand. There are even professional persons who go about to poison the eye, which they do with verdigris, or sew it up altogether. Our equipment consisted of twelve men; of these only ten were liable to conscription, and of these, seven were either one eyed or forefingerless."

Mutilations, in foreign services, are said to be most usually perpetrated when the soldier is on furlough, and at the instigation of friends. They often say they received the injury from other hands; but if the wound be gunshot, the skin, blackened with powder, shows that it was inflicted by their own hands. Two instances of mutilation by cutting off the index finger of the right hand, have occurred to the writer. In one, so much of the member was left as to enable the man to use and fire the musket; he was kept in service. The propriety of granting certificates for discharge depends on the extent of each injury. If the index finger be cut off beyond the first phalanx, the soldier will be able to do his duty. The loss of the thumb is a disqualification; as is the loss of the great toe, or of any two fingers, or toes.

LXXXIX.

Disease of the *rectum—fistula ani*—and aggravated forms of *Hæmorrhoids* are all disqualifying causes, for no diseases interfere more with the power to march ~~than these~~.

These cases are frequently connected with disease of the liver and lung—alternating with them. This constitutional vice confirms the objection. Although the writer has known a soldier do his duty for many years while laboring under *fistula ani*, and do it well, such cases are very rare. Men with fistula are unfit for service.

Hæmorrhoids if large, externally prominent, or given to profuse bleeding, are good cause for discharge, and these cannot be successfully simulated. Piles that cannot be seen, however complained of, are probably feigned;

while no room should be left for suspicion that what bleeding occurs, is simulated.

XC.

The following remarks from a foreign military medical officer, carry on their face the utmost importance.

“ There is a much greater proportion of malingerers in some regiments than in others, a difference in part dependent on the discipline of a corps; the conduct and general demeanor of soldiers being greatly influenced by the nature of the discipline under which they are controlled. But with regard to the simulators of disease or disabilities, I am disposed to think that they never become numerous in a regiment, when the surgeon possesses experience, and that peculiar tact which enables him not only to detect malingerers, but so to adapt

means to the end as *to induce them to give in*. Soldiers soon form an opinion of the ability of their medical attendant in this respect, and seldom attempt to deceive unless they think their artifice will succeed. This tact does not depend upon *severity*; for the most efficient surgeon will often doubt, without expressing his suspicions, and seem to be the dupe of a schemer, that he may become his master."

FORM OF ENLISTMENT.

I, _____ born in _____ in the
State of _____ aged _____ years, and by
occupation a _____ Do hereby acknowledge to have
voluntarily enlisted this _____ day of _____ 185 _____,
as a Soldier in the ARMY OF THE UNITED STATES OF
AMERICA, to serve for the period of FIVE YEARS, unless
sooner discharged by proper authority: Do also agree to
accept such bounty, pay, rations, and clothing, as are, or
may be, established by law. And I, _____ do
solemnly swear, that I will bear true faith and allegiance
to the United States of America, and that I will serve
them honestly and faithfully against all their enemies or
opposers whomsoever: and that I will observe and obey
the orders of the President of the United States, and the
orders of the officers appointed over me, according to the
Rules and Articles of War.

Sworn and subscribed to, at
this day of 185
Before

I CERTIFY, ON HONOR, That I have carefully examined the above named Recruit, agreeably to the General Regulations of the Army, and that in my opinion he is free from *all bodily defects* and *mental* infirmity, which would, *in any way*, disqualify him from performing the duties of a soldier.

Examining Surgeon.

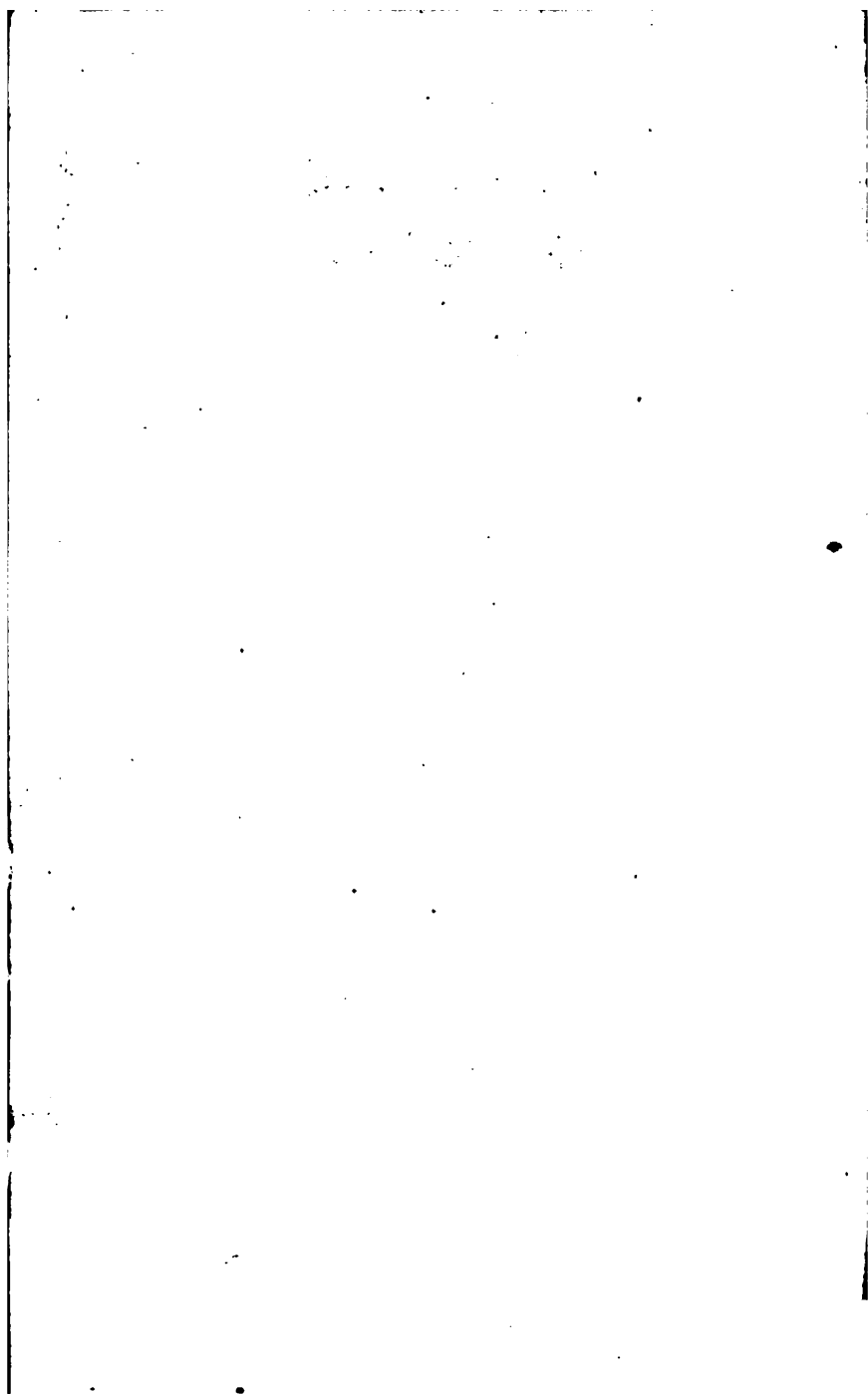
I CERTIFY, ON HONOR, That I have minutely inspected the Recruit

previously to his enlistment, and that he was *entirely sober* when enlisted; that, to the best of my *judgment and belief*, he is of lawful age; and that, in accepting him as duly qualified to perform the duties of an able-bodied soldier, I have *strictly observed the Regulations which govern the recruiting service*. This soldier has *eyes,* *hair,* *complexion,*
is *feet* *inches high.*

Recruiting Officer.

T H E E N D .





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